# STIC Database Tracking Number: 148045

TO: Andrea Ragonese Location: RND 7c59

Art Unit: 3743

Case Serial Number: 10/613860

From: Jeanne Horrigan Location: RND 8A34 Phone: 571-272-3529

jeanne.horrigan@uspto.gov

# Search Notes

Attached are the search results for the seals between a conduit and a lung and between a conduit and an airway or thoracic wall.

I tagged the one reference that I thought was useful, but I suggest that you review ALL of the results.

Also attached is a search feedback form. Completion of the form is voluntary. Your completing this form would help us improve our search services.

I hope the attached information is useful. Please feel free to contact me if you have any questions or need additional searching on this application.



# Solomon, Terrance

# Rec'vd 3/17/05 8:25a

From:

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Subject:

Generic form response

ResponseHeader=Commercial Database Search Request

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MyDate=Wed Mar 16 21:24:30 EST 2005

submitto=STIC-EIC3700@uspto.gov

Name=Andrea Ragonese

Empno=77465

Phone=571-272-4804

Artunit=3743

Office=RND D07C59

Serialnum=10613860

PatClass=128/207.15

Earliest=06/05/2003

Searchtopic=Please only do a search for CLAIM 1 of this application. Do not search claim

This is a sealing device for a ventilation bypass system for the lungs. Basically, there are 2 seals to this one conduit. One seal is airtight between the conduit and the airway. The other seal is between the conduit and the lung.

Similar application: 10/613860 (now patented)

Comments=

send=SEND

du= Don Tanaka (CA)

20040040555

128 /200,24

A61M 016/00

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005 File 350:Derwent WPIX 1963-2005/UD, UM\_&UP=200519 (c) 2005 Thomson Derwent File 349:PCT FULLTEXT 1979-2005/UB=20050324,UT=20050317 (c) 2005 WIPO/Univentio File 348:EUROPEAN PATENTS 1978-2005/Mar W03 (c) 2005 European Patent Office Description Set Items S1 59 AU='TANAKA D' S2 30 AU='TANAKA DON' OR AU='TANAKA DON A' OR AU='TANAKA DONALD A' 4 AU='TANAKA D A' S3 92 S1:S3 S4 16 VENTILATION () BYPASS S<sup>-</sup>5 13 S4 AND S5 S6 909986 S7 SEAL??? 12 S6 AND S7 S8 S5 NOT S6 S9 3 (Item 1 from file: 348) 8/26,TI/5 DIALOG(R) File 348: EUROPEAN PATENTS (c) 2005 European Patent Office. All rts. reserv. Methods and devices to accelerate wound healing in thoracic anastomosis applications (Item 6 from file: 348) 8/26,TI/10 DIALOG(R) File 348: EUROPEAN PATENTS (c) 2005 European Patent Office. All rts. reserv. 01808570 Delivery devices for localized pleurodesis agent delivery 8/3, AB, IC/1 (Item 1 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv. 016665711 WPI Acc No: 2004-824431/200482 XRPX Acc No: N04-651193 Intra-thoracic collateral ventilation bypass system for removing air in emphysematous lungs, has conduits connected to trachea and lung of patient, and sealing devices for establishing airtight seals between conduits, airway and lung Patent Assignee: CORDIS CORP (CRDC ); TANAKA D (TANA-I) Inventor: TANAKA D Number of Countries: 036 Number of Patents: 004 Patent Family: Patent No Kind Date Applicat No Kind Date Week A1 20041208 EP 2004253370 20040604 200482 B EP 1484074 Α US 20040244803 A1 20041209 US 2003475990 P 20030605 200482 US 2004852529 Α 20040524 JP 2004358260 A 20041224 JP 2004167456 A 20040604 200502 CA 2470023 A1 20041205 CA 2470023 Α 20040604 200503 Priority Applications (No Type Date): US 2004852529 A 20040524; US 2003475990 P 20030605 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

Serial 10/613860 March 31, 2005

EP 1484074 \_ A1 E 34 A61M-016/00

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR

US 20040244803 A1 A61M-016/00 Provisional application US 2003475990

JP 2004358260 A 29 A61M-016/04 CA 2470023 A1 E A61M-016/00

Abstract (Basic): EP 1484074 A1

Abstract (Basic):

NOVELTY - The system (800) has two conduits (802,806) connected by a fitting (808). One conduit (802) is in fluid communication with an airway in proximity to the trachea (804) of a patient, while the other conduit (806) is in fluid communication with the inner volume of the lung (812) of the patient. Sealing devices are used for establishing airtight seals between the conduits, airway and lung.

USE - For removing air in emphysematous lungs. For chemical pleurodesis.

ADVANTAGE - Uses the trachea for expelling trapped air rather than a containment or trap device. Assists in pulmonary decompression and non-surgical or resection lung volume reduction. Improves oxygen transfer efficiency in the lungs, thereby reducing oxygen supply requirements which in turn reduces the patient's medical costs. Provides a long-term oxygen therapy system that allows for improved self-image, improved mobility, greater exercise capability, and is easily maintained.

DESCRIPTION OF DRAWING(S) - The figure is a diagrammatic representation of the collateral ventilation bypass system.

Collateral ventilation bypass system (800)

Conduits (802,806)

Trachea (804)

Fitting (808)

Lung (812)

pp; 34 DwgNo 8/16

International Patent Class (Main): A61M-016/00; A61M-016/04 International Patent Class (Additional): A61M-025/00; A61M-025/02

8/3, AB, IC/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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016662458

WPI Acc No: 2004-821177/200481 Related WPI Acc No: 2004-806384

XRAM Acc No: C04-285357 XRPX Acc No: N04-648362

Collateral ventilation bypass system for increasing expiratory flow from diseased lung, includes sealing devices providing airtight seal between first conduit and patient's trachea, and between second conduit and patient's lung

Patent Assignee: CORDIS CORP (CRDC ); TANAKA D (TANA-I)

Inventor: TANAKA D

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20040231674 A1 20041125 US 2003472101 P 20030520 200481 B

Serial 10/613860 March 31, 2005

US 2004844708 A 20040512 JP 2004358241 A 20041224 JP 2004150669 A 20040520 200502

Priority Applications (No Type Date): US 2003472101 P 20030520; US 2004844708 A 20040512

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
US 20040231674 A1 20 A61M-016/00 Provisional application US 2003472101

JP 2004358241 A 23 A61M-016/04

Abstract (Basic): US 20040231674 A1 Abstract (Basic):

NOVELTY - A collateral ventilation bypass system has a first conduit in fluid communication with a trachea of a patient; second conduit having first end connected to the first conduit and second end passing through a lung of a patient at a predetermined site; first sealing device providing airtight seal between the first conduit and the trachea; and a second sealing device providing airtight seal between the second conduit and the lung.

DETAILED DESCRIPTION - A collateral ventilation bypass system (100) includes a first conduit in fluid communication with a trachea of a patient; second conduit (04) having first end connected to the first conduit and second end passing through a lung (108) of a patient at a predetermined site to establish fluid communication between the trachea and the inner volume of the lung; a first sealing device providing airtight seal between the first conduit and the trachea; and a second sealing device providing airtight seal between the second conduit and the lung.

USE - For increasing expiratory flow from diseased lung(s).

ADVANTAGE - The bypass system removes trapped air in emphysematous hyperinflated lungs, thus treating another aspect of chronic obstructive pulmonary disease. The long-term oxygen therapy system improves oxygen transfer efficiency in the lungs thus reducing oxygen supply requirements, which in turn reduces the patient's medical costs. The system also allows for improved self-image, improved mobility, greater exercise capability, and is easily maintained.

DESCRIPTION OF DRAWING(S) - The figure is a diagrammatic view of the long-term oxygen therapy system.

Bypass system (100)

Oxygen source (102)

Conduit (104)

Valve (106)

Lung (108)

pp; 20 DwgNo 1/2

International Patent Class (Main): A61M-016/00; A61M-016/04
International Patent Class (Additional): A62B-007/00

8/3,AB,IC/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

016647664

WPI Acc No: 2004-806384/200480

Serial 10/613860 March 31, 2005

Related WPI Acc No: 2004-821177

XRPX Acc No: N04-635695

Collateral ventilation bypass system for use in chemical pleurodesis, has oxygen carrying conduit with one end in fluid communication with trachea of patient, and another end passing through lung of patient at predetermined site

Patent Assignee: CORDIS CORP (CRDC ); TANAKA D (TANA-I)

Inventor: TANAKA D

Number of Countries: 036 Number of Patents: 004

Patent Family: .

Kind Date Applicat No Kind Date Week Patent No A2 20041201 EP 2004252953 Α 20040520 200480 B EP 1481650 A1 20041120 CA 2468074 Α 20040520 200481 CA 2468074 US 20040231674 A1 20041125 US 2003472101 Р 20030520 200481 US 2004844708 Α 20040512 JP 2004358241 A 20041224 JP 2004150669 Α 20040520 200502

Priority Applications (No Type Date): US 2004844708 A 20040512; US 2003472101 P 20030520

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1481650 A2 E 24 A61F-002/06

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR

CA 2468074 A1 E A61M-016/00

US 20040231674 A1 20 A61M-016/00 Provisional application US 2003472101

JP 2004358241 A 23 A61M-016/04

Abstract (Basic): EP 1481650 A2

Abstract (Basic):

NOVELTY - The system has an oxygen carrying conduit (104) with an end in fluid communication with a trachea of a patient, and another end passing through a lung (108) of a patient at a predetermined site. A sealing device establishes an airtight seal between the former end of the conduit and trachea. Another sealing device establishes an airtight seal between the latter end of the oxygen carrying conduit and lung.

USE - Used in chemical pleurodesis for removing trapped air in emphysematous hyperinflater lung, to treat chronic obstructive pulmonary disease.

ADVANTAGE - The conduit effectively establishes fluid communication between the trachea and the inner volume of the lung, thus increasing an expiratory flow from a diseased lung. The device hence effectively provides treatment to chronic obstructive pulmonary disease.

DESCRIPTION OF DRAWING(S) - The drawing shows a diagrammatic representation of a long term oxygen therapy system.

Oxygen therapy system (100)

Oxygen source (102)

Oxygen carrying conduit (104)

One-way valve (106)

Lungs (108)

pp; 24 DwgNo 1/12

International Patent Class (Main): A61F-002/06; A61M-016/00; A61M-016/04 International Patent Class (Additional): A62B-007/00

Serial 10/613860 March 31, 2005

8/3,AB,IC/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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016046817

WPI Acc No: 2004-204668/200420

XRAM Acc No: C04-080914 XRPX Acc No: N04-162613

Collateral ventilation bypass trap system for removing trapped air in emphysematous lungs, comprises at least one conduit having first end connected to containment vessel and second end passing through thoracic wall and lung of patient

\_ \_ \_

Patent Assignee: CORDIS CORP (CRDC ); TANAKA D (TANA-I)

Inventor: TANAKA D

Number of Countries: 035 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
EP 1393760 A1 20040303 EP 2003255306 A 20030827 200420 B
US 20040040555 A1 20040304 US 2002406624 P 20020828 200420
US 2003613860 A 20030703
CA 2438823 A1 20040228 CA 2438823 A 20030828 200421

 JP 2004130112 A
 20040430 JP 2003303398 A
 20030827 200430

 AU 2003236462 A1
 20040318 AU 2003236462 A
 20030825 200450

Priority Applications (No Type Date): US 2003613860 A 20030703; US 2002406624 P 20020828

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1393760 A1 E 16 A61M-001/00

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

US 20040040555 A1 A61M-016/00 Provisional application US 2002406624

CA 2438823 A1 E A61M-016/00 JP 2004130112 A 19 A61M-016/04 AU 2003236462 A1 A61M-016/00

Abstract (Basic): EP 1393760 A1

Abstract (Basic):

NOVELTY - A collateral ventilation bypass trap system comprising containment vessel for collecting discharge from lung(s) of a patient; conduit having first end connected to containment vessel and second end passing through the thoracic wall and lung of a patient; and sealing device for establishing a fluid tight seal between the conduit and thoracic wall and between the conduit and the lung, is new.

DETAILED DESCRIPTION - A collateral ventilation bypass trap system, comprises containment vessel for collecting discharge from lung(s) of a patient; at least one conduit having a first end connected to the containment vessel and a second end passing through the thoracic wall and lung of a patient at a predetermined site to establish fluid communication between the containment vessel and the inner volume of the lung; and sealing device for establishing a fluid tight seal between the conduit and thoracic wall and between the conduit and the

Serial 10/613860 March 31, 2005

lung.

ACTIVITY - Respiratory-Gen.; No biological data given. MECHANISM OF ACTION - None given.

USE - The system is used for removing trapped air in emphysematous lungs, for treating hypoxia caused by chronic obstructive pulmonary disease such as emphysema and chronic bronchitis.

ADVANTAGE - The system increases the expiratory flow from an individual suffering from chronic obstructive pulmonary disease.

pp; 16 DwgNo 0/7

International Patent Class (Main): A61M-001/00; A61M-016/00; A61M-016/04 International Patent Class (Additional): A61M-016/10; A61M-016/20

8/3,AB,IC/6 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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#### 01823923

Intra-thoracic collateral ventilation bypass system
Intra-thorax kollaterales Atmungsbypasssystem
System de derivation respiratoire intra-thoracique collateral
PATENT ASSIGNEE:

Cordis Corporation, (280674), 14201 N.W. 60th Avenue, Miami Lakes Florida 33014, (US), (Applicant designated States: all)

Tanaka, Don , 18774 Devon Avenue, Saratoga, CA 95070, (US LEGAL REPRESENTATIVE:

Belcher, Simon James (58311), Urquhart-Dykes & Lord LLP Tower North Central Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 1484074 Al 041208 (Basic)

APPLICATION (CC, No, Date): EP 2004253370 040604;

PRIORITY (CC, No, Date): US 475990 030605; US 852529 040524

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: A61M-016/00

#### ABSTRACT EP 1484074 A1

An intra-thoracic collateral ventilation bypass system is described. The system comprises at least one conduit having first and second ends, the first end being in fluid communication with an airway in proximity to a trachea of a patient and the second end being in fluid communication with the inner volume of a lung of a patient at a predetermined site. The system also comprises a first sealing device is provided for establishing an airtight seal between the conduit and the airway; and a second sealing device for establishing an airtight seal between the conduit and the lung.

ABSTRACT WORD COUNT: 98 NOTE:

Figure number on first page: 8

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS A (English) 200450 81

Serial 10/613860 March 31, 2005

Total word count - document A 13971
Total word count - document B 0
Total word count - document A + B 13971

8/3,AB,IC/7 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.

#### 01823884

Lung reduction system
System zum Reduzieren der Lunge
Systeme de reduction pulmonaire
PATENT ASSIGNEE:

Cordis Corporation, (280674), 14201 N.W. 60th Avenue, Miami Lakes Florida 33014, (US), (Applicant designated States: all)

Tanaka, Don , 18774 Devon Avenue, Saratoga, CA 95070, (US LEGAL REPRESENTATIVE:

Belcher, Simon James (58311), Urquhart-Dykes & Lord LLP Tower North Central Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 1484034 A2 041208 (Basic)

APPLICATION (CC, No, Date): EP 2004253234 040529;

PRIORITY (CC, No, Date): US 475291 P 030603; US 852271 P 040524

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: A61F-002/06

#### ABSTRACT EP 1484034 A2

A lung reduction device comprising at least one first member in fluid communication, at a predetermine site, within a lung of a patient. A sealing device establishes an airtight seal between the at least one first member and the lung; and a second member is connected to the at least one first member. The second member comprises an apparatus for allowing air from the lung of the patient to vent to an area external of the lung and preventing air from an area external of the lung from re-entering the lung through the device.

ABSTRACT WORD COUNT: 95 NOTE:

Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200450 209
SPEC A (English) 200450 13036
Total word count - document A 13245
Total word count - document B 0
Total word count - documents A + B 13245

8/3,AB,IC/8 (Item 4 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS

Serial 10/613860 March 31, 2005

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#### 01820334

Device for assisting pulmonary decompression

Vorrichtung zur Dekompression der Lunge

Dispositif pour assister decompression pulmonaire

PATENT ASSIGNEE:

Cordis Corporation, (280674), 14201 N.W. 60th Avenue, Miami Lakes Florida 33014, (US), (Applicant designated States: all)
INVENTOR:

Tanaka, Don , 18774 Devon Avenue, Saratoga, CA 95070, (US LEGAL REPRESENTATIVE:

Belcher, Simon James (58311), Urquhart-Dykes & Lord LLP Tower North Central Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 1481701 Al 041201 (Basic)

APPLICATION (CC, No, Date): EP 2004253191 040528;

PRIORITY (CC, No, Date): US 473999 P 030529; US 850022 040520

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: A61M-016/00; A61M-016/04; A61M-025/01; A61M-001/00

ABSTRACT EP 1481701 A1

A pulmonary decompression assist device is described. The device comprises at least one first member in fluid communication, at a predetermined site, within a lung of a patient. A sealing device established an airtight seal between the at least one first member and the lung. A second member is connected to the at least one first member, the second member comprising an apparatus for drawing air from the lung of the patient through the at least one first member and venting it to an area external of the lung.

ABSTRACT WORD COUNT: 90.

NOTE:

Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200449 194
SPEC A (English) 200449 11676
Total word count - document A 11870
Total word count - document B 0
Total word count - documents A + B 11870

8/3,AB,IC/9 (Item 5 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS

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#### 01820261

Intra/extra-thoracic collateral ventilation bypass system
Kollaterales Intra/Extra-Thoraxventilationssystem
Systeme intra/extra de pontage pour la ventilation thoracique collaterale
PATENT ASSIGNEE:

Cordis Corporation, (280674), 14201 N.W. 60th Avenue, Miami Lakes Florida

Serial 10/613860 March 31, 2005

33014, (US), (Applicant designated States: all) INVENTOR:

Tanaka, Don , 18774 Devon Avenue, Saratoga, CA 95070, (US LEGAL REPRESENTATIVE:

Belcher, Simon James (58311), Urquhart-Dykes & Lord LLP Tower North Central Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 1481650 A2 041201 (Basic)

APPLICATION (CC, No, Date): EP 2004252953 040520;

PRIORITY (CC, No, Date): US 472101 P 030520; US 844708 P 040512

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;

HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: A61F-002/06

#### ABSTRACT EP 1481650 A2

A collateral ventilation bypass system comprising a first conduit in fluid communication with a trachea of a patient. The system further comprises at least one second conduit having first and second ends, the first end being releasably connected to the first conduit and the second end passing through a lung of a patient at a predetermined site, thereby establishing fluid communication between the trachea and the inner volume of the lung. A first sealing device is provided for establishing an airtight seal between the first conduit and the trachea; and a second sealing device is provided for establishing an airtight seal between the second conduit and the lung. In various embodiments, the system may be intrathoracic, extrathoracic or a combination thereof. In order for the system to be effective, an airtight seal between the parietal and visceral pleurae is required. Chemical pleurodesis is utilized for creating the seal .

ABSTRACT WORD COUNT: 149

Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200449 324
SPEC A (English) 200449 9875
Total word count - document A 10199

Total word count - document B 0
Total word count - documents A + B 10199

8/3,AB,IC/11 (Item 7 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS

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01701656
Fluid trap system
Flussigkeitsfalle
Systeme de piege a liquides
PATENT ASSIGNEE:

Cordis Corporation, (280674), 14201 N.W. 60th Avenue, Miami Lakes Florida 33014, (US), (Applicant designated States: all)
INVENTOR:

Serial 10/613860 March 31, 2005

Tanaka, Don., 18774 Devon Avenue, Saratoga, CA 95070, (US LEGAL REPRESENTATIVE:

Belcher, Simon James (58311), Urquhart-Dykes & Lord Tower North Central Merrion Way, Leeds LS2 8PA, (GB)

PATENT (CC, No, Kind, Date): EP 1393760 A1 040303 (Basic)

APPLICATION (CC, No, Date): EP 2003255306 030827;

PRIORITY (CC, No, Date): US 406624 P 020828; US 613860 P 030703

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;

HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: A61M-001/00; A61M-016/10

#### ABSTRACT EP 1393760 A1

A long term oxygen therapy system having an oxygen supply (102), directly linked with a patient's lung or lungs, includes an oxygen source (102), one or more valves (106) and fluid carrying conduits (104). The fluid carrying conduits (104) link the oxygen source (102) to diseased sites within the patient's lungs (108). A collateral ventilation bypass trap system (702) directly linked with a patient's lung or lungs may be utilized to increase the expiratory flow from the diseased lung or lungs, thereby treating another aspect of chronic obstructive pulmonary disease. The system includes a trap (702), a filter/one-way valve (706) and an air carrying conduit (704). The system can be used to treat hypoxia caused by chronic obstructive pulmonary disease such as emphysema and chronic bronchitis.

ABSTRACT WORD COUNT: 127

NOTE:

Figure number on first page: NONE

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200410 190
SPEC A (English) 200410 6886
Total word count - document A 7076
Total word count - document B 0
Total word count - documents A + B 7076

8/3,AB,IC/12 (Item 8 from file: 348) DIALOG(R)File 348:EUROPEAN PATENTS

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#### 01691994

Long term oxygen therapy system

System fur langandauernde Sauerstofftherapie

Systeme pour une oxygenotherapie de longue duree

PATENT ASSIGNEE:

Cordis Corporation, (280674), 14201 N.W. 60th Avenue, Miami Lakes Florida 33014, (US), (Applicant designated States: all)

INVENTOR:

Tanaka, Don , 18774 Devon Avenue, Saratoga, CA 95070, (US LEGAL REPRESENTATIVE:

Belcher, Simon James (58311), Urquhart-Dykes & Lord Tower North Central Merrion Way, Leeds LS2 8PA, (GB)

Serial 10/613860 March 31, 2005

PATENT (CC, No, Kind, Date): EP 1386635 Al 040204 (Basic)
APPLICATION (CC, No, Date): EP 2003254748 030729;
PRIORITY (CC, No, Date): US 399907 P 020731; US 613358 030703
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS: A61M-037/00; A61M-031/00; A61M-016/00

#### ABSTRACT EP 1386635 A1

A long term oxygen therapy system (100) having an oxygen supply (102) directly linked with a patient's lung (108) or lungs may be utilized to more efficiently treat hypoxia caused by chronic obstructive pulmonary disease such as emphysema and chronic bronchitis. The system includes an oxygen source (102), one or more valves (106) and fluid carrying conduits (104). The fluid carrying conduits (104) link the oxygen source to diseased sites within the patient's lungs (108).

ABSTRACT WORD COUNT: 76

NOTE:

Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 200406 380
SPEC A (English) 200406 4851
Total word count - document A 5231
Total word count - document B 0
Total word count - documents A + B 5231

9/26,TI/2 (Item 2 from file: 350) DIALOG(R)File 350:Derwent WPIX

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010607981

WPI Acc No: 1996-104934/199611

Tracheal tube cuff inflation control system - has low pressure valve in series with high pressure valve in cuff inflation line, while each valve has inlet and outlet port and exhaust port with valve urged toward closed condition

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Serial 10/613860
March 31, 2005
File 155:MEDLINE(R) 1951-2005/Mar W4
         (c) format only 2005 The Dialog Corp.
       5:Biosis Previews(R) 1969-2005/Mar W3
File
         (c) 2005 BIOSIS
File 73:EMBASE 1974-2005/Mar W3
         (c) 2005 Elsevier Science B.V.
File 34:SciSearch(R) Cited Ref Sci 1990-2005/Mar W3
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
Set
        Items Description
S1
          291
                AU='TANAKA D' OR AU='TANAKA D A' OR AU='TANAKA D.'
S2
            7
                AU='TANAKA DON' OR AU='TANAKA DON A' OR AU='TANAKA DONALD -
            A١
           14
                AU='TANAKA DON L' OR AU='TANAKA DONALD L'
S3
               VENTILATION()BYPASS AND SEAL???
S4
           0
        81625 SEAL???
S5
           0 S1:S3 AND S5
S6
            9 VENTILATION()BYPASS
S7
            0 S1:S3 AND S7
S8
            0 BYPASS AND S1:S3
S9
           0 VENTILATION AND S1:S3
S10
      62743 COLLATERAL
S11
          8 S1:S3 AND S11
S13
            5 RD (unique items)
          (Item 1 from file: 155)
13/6/1
12748159 PMID: 10675456
  Altered flow dynamics of intravascular contrast material to the liver in
superior vena cava syndrome: CT findings.
Mar-Apr 2000
           (Item 1 from file: 5)
13/9/2
DIALOG(R) File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200400303988
0014933231
Devices for creating collateral channels
AUTHOR: Keast Thomas (Reprint); Thompson David; Tanaka Don
AUTHOR ADDRESS: 860 Park Dr., #3, Mountain View, CA, 94040, USA**USA
JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1283 (3): June 15, 2004 2004
MEDIUM: e-file
PATENT NUMBER: US 6749606 PATENT DATE GRANTED: June 15, 2004 20040615
PATENT CLASSIFICATION: 606-41 PATENT COUNTRY: USA
ISSN: 0098-1133 _(ISSN print)
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
ABSTRACT: The devices disclosed herein are directed to altering gaseous
  flow within a lung to improve the expiration cycle of, for instance, an
  individual having Chronic Obstructive Pulmonary Disease. More
  particularly, these devices produce collateral openings or channels
  through the airway wall so that oxygen depleted/carbon dioxide rich air
```

ASRC Searcher: Jeanne Horrigan Serial 10/613860

March 31, 2005

is able to pass directly out of the lung tissue to facilitate both the exchange of oxygen ultimately into the blood and/or to decompress hyper-inflated lungs.

#### DESCRIPTORS:

MAJOR CONCEPTS: Pulmonary Medicine--Human Medicine, Medical Sciences BIOSYSTEMATIC NAMES: Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia

ORGANISMS: human (Hominidae)

COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals; Primates;

Vertebrates

DISEASES: chronic obstructive pulmonary disease--respiratory system

MESH TERMS: Lung Diseases, Obstructive (MeSH)

METHODS & EQUIPMENT: lung device--medical equipment `

MISCELLANEOUS TERMS: collateral channels; oxygen exchange

CONCEPT CODES:

16006 Respiratory system - Pathology

BIOSYSTEMATIC CODES:

86215 Hominidae

(Item 2 from file: 5) 13/9/3 DIALOG(R) File 5:Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv.

0014868382 BIOSIS NO.: 200400249139

Devices for creating collateral channels

AUTHOR: Roschak Ed (Reprint); Tanaka Don; Haugaard Dave; Keast Thomas AUTHOR ADDRESS: Mountain View, CA, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1280 (5): Mar. 30, 2004 2004

MEDIUM: e-file

PATENT NUMBER: US 6712812 PATENT DATE GRANTED: March 30, 2004 20040330 PATENT CLASSIFICATION: 606-41 PATENT ASSIGNEE: Broncus Technologies, Inc.

PATENT COUNTRY: USA

ISSN: 0098-1133 (ISSN print)

DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: The devices disclosed herein are directed to altering gaseous flow within a lung to improve the expiration cycle of, for instance, an individual having Chronic Obstructive Pulmonary Disease. More particularly, these devices produce collateral openings or channels through the airway wall so that oxygen depleted/carbon dioxide rich air is able to pass directly out of the lung tissue to facilitate both the exchange of oxygen ultimately into the blood and/or to decompress hyper-inflated lungs.

# **DESCRIPTORS:**

MAJOR CONCEPTS: Equipment Apparatus Devices and Instrumentation; Pulmonary Medicine--Human Medicine, Medical Sciences DISEASES: chronic obstructive pulmonary disease--respiratory system disease, therapy

Serial 10/613860 March 31, 2005

MESH TERMS: Lung Diseases, Obstructive (MeSH)

METHODS & EQUIPMENT: collateral channel creating device--surgical

instrument
CONCEPT CODES:

12512 Pathology - Therapy

16006 Respiratory system - Pathology

13/9/4 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0014775990 BIOSIS NO.: 200400156747

Methods and devices for creating collateral channels in the lungs
AUTHOR: Cooper Joel D (Reprint); Loomas Bryan; Tanaka Don; Laufer Michael
D; Thompson David; Davenport James M; Kaplan Gary; Haugaard Dave; French
Glendon E

AUTHOR ADDRESS: St. Louis, MO, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1279 (3): Feb. 17, 2004 2004

MEDIUM: e-file

PATENT NUMBER: US 6692494 PATENT DATE GRANTED: February 17, 2004 20040217 PATENT CLASSIFICATION: 606-46 PATENT ASSIGNEE: Broncus Technologies, Inc.

PATENT COUNTRY: USA

ISSN: 0098-1133 \_(ISSN print)

DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: The devices and methods disclosed herein are directed to altering gaseous flow within a lung to improve the expiration cycle of, for instance, an individual having Chronic Obstructive Pulmonary Disease. More particularly, these devices and methods produce and to maintain collateral openings or channels through the airway wall so that expired air is able to pass directly out of the lung tissue to facilitate both the exchange of oxygen ultimately into the blood and/or to decompress hyper-inflated lungs. The devices and methods also disclose locating and selecting a site for creation of a collateral opening.

#### DESCRIPTORS:

MAJOR CONCEPTS: Equipment Apparatus Devices and Instrumentation; Methods and Techniques; Pulmonary Medicine--Human Medicine, Medical Sciences DISEASES: chronic obstructive pulmonary disease--respiratory system disease, therapy

MESH TERMS: Lung Diseases, Obstructive (MeSH)

METHODS & EQUIPMENT: lung collateral channel creating devices--medical equipment; lung collateral channel creating method--clinical techniques, therapeutic and prophylactic techniques

CONCEPT CODES:

12512 Pathology - Therapy

16006 Respiratory system - Pathology

13/9/5 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

Serial 10/613860 March 31, 2005

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0014553926 BIOSIS NO.: 200300522645

Devices for creating collateral in the lungs

AUTHOR: Laufer Michael D (Reprint); Roschak Ed; Tanaka Don

AUTHOR ADDRESS: Mountain View, CA, USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1275 (1): Oct. 7, 2003 2003

MEDIUM: e-file

PATENT NUMBER: US 6629951 PATENT DATE GRANTED: October 07, 2003 20031007 PATENT CLASSIFICATION: 604-9601 PATENT ASSIGNEE: Broncus Technologies,

Inc. PATENT COUNTRY: USA
ISSN: 0098-1133 \_(ISSN print)

DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: The devices and methods disclosed herein are directed to altering gaseous flow within a lung to improve the expiration cycle of, for instance, an individual having Chronic Obstructive Pulmonary Disease. More particularly, these devices and methods produce and to maintain collateral openings or channels through the airway wall so that expired air is able to pass directly out of the lung tissue to facilitate both the exchange of oxygen ultimately into the blood and/or to decompress hyper-inflated lungs. The devices and methods also disclose locating and selecting a site for creation of a collateral opening.

#### DESCRIPTORS:

MAJOR CONCEPTS: Respiratory System--Respiration

ORGANISMS: PARTS ETC: airway--respiratory system; blood--blood and

lymphatics; hyper-inflated lungs--respiratory system; lung--respiratory system; lung tissue--respiratory system

DISEASES: chronic obstructive pulmonary disease--respiratory system

MESH TERMS: Lung Diseases, Obstructive (MeSH)

### CONCEPT CODES:

15002 Blood - Blood and lymph studies

15004 Blood - Blood cell studies

16004 Respiratory system - Physiology and biochemistry

16006 Respiratory system - Pathology

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005 File 155:MEDLINE(R) 1951-2005/Mar W4 (c) format only 2005 The Dialog Corp. 5:Biosis Previews(R) 1969-2005/Mar W3 File (c) 2005 BIOSIS File 73:EMBASE 1974-2005/Mar W4 (c) 2005 Elsevier Science B.V. File 34:SciSearch(R) Cited Ref Sci 1990-2005/Mar W3 (c) 2005 Inst for Sci Info File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info File 94:JICST-EPlus 1985-2005/Feb W2 (c) 2005 Japan Science and Tech Corp (JST) File 95:TEME-Technology & Management 1989-2005/Feb W3 (c) 2005 FIZ TECHNIK File 99: Wilson Appl. Sci & Tech Abs 1983-2005/Feb (c) 2005 The HW Wilson Co. File 6:NTIS 1964-2005/Mar W3 (c) 2005 NTIS, Intl Cpyrght All Rights Res 8:Ei Compendex(R) 1970-2005/Mar W3 File (c) 2005 Elsevier Eng. Info. Inc. File 35:Dissertation Abs Online 1861-2005/Mar (c) 2005 ProQuest Info&Learning File 65:Inside Conferences 1993-2005/Mar W4 (c) 2005 BLDSC all rts. reserv. File 144: Pascal 1973-2005/Mar W3 (c) 2005 INIST/CNRS Items Description Set CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-S1 3145371 ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ? 16916 AIRTIGHT OR AIR()TIGHT OR HERMETIC? OR IMPERMEAB?(1N)AIR S2 707132 SEAL??? OR OCCLUS??? OR OCCLUD? S3 S4 341036 AIRWAY? ? 37235 (THORACIC OR CHEST) () WALL S5 3748827 PULMONARY OR RESPIRAT? OR LUNG? ? OR COPD S6 1635273 LUNG S7 220656 LUNGS S8 13 S1 AND S2()S3 AND S4:S5 AND S7:S8 S9 0 S9/2004:2005 S10 RD S9 (unique items) S11 S12 Sort S11/ALL/PY, A (Item 1 from file: 73) 12/3,K/1 DIALOG(R) File 73: EMBASE (c) 2005 Elsevier Science B.V. All rts. reserv.

#### 02989678 EMBASE No: 1985033639

Prototype airway management system for use during laser surgery Silver C.E.; Schneider K.L.; Merav A.D.; Nagashima H. Head and Neck Surgical Service, Montefiore Medical Center, Bronx, NY United States

Laryngoscope (LARYNGOSCOPE) (United States) 1984, 94/11 I (1511-1512)

CODEN: LARYA

DOCUMENT TYPE: Journal LANGUAGE: ENGLISH

Serial 10/613860 March 31, 2005

A Norton metal endotracheal tube with a Merav parachute cuff cemented to the distal end has solved many of the problems involved in administration of anesthesia for laser surgery of the upper aerodigestive tract. The tube is fireproof and provides an airtight seal for positive pressure ventilation without the impediment of a cuff channel. It is ideal for laser surgery of the oral cavity and pharynx and may be... MEDICAL DESCRIPTORS:

\*endotracheal intubation; \*laser surgery; \* lung ventilation

12/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

10928115 PMID: 7710408

The laryngeal mask airway for dental surgery -- a review.

Brimacombe J; Berry A

Department of Anaesthesia, Cairns Base Hospital, University of Oueensland.

Australian dental journal (AUSTRALIA) Feb 1995, 40 (1) p10-4, ISSN 0045-0421 Journal Code: 0370612

Publishing Model Print

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The ideal airway requirements for oral surgery are the provision of a stable, unobstructed airway, protection of the lungs from aspiration, minimal interference with the surgical field and a low complication rate. Neither the nasal mask nor endotracheal tube meet these requirements. The laryngeal mask airway (LMA), provides a third type of airway for consideration in oral surgery that offers some of the benefits of intubation and avoids...

... inserted without use of a laryngoscope or muscle relaxants, and is designed to produce an **airtight seal** around the laryngeal inlet. It provides a secure **airway** suitable for spontaneous or controlled ventilation and acts as an airtight throat pack. Scavenging of...

12/3,K/3 (Item 3 from file: 35)

DIALOG(R) File 35: Dissertation Abs Online

(c) 2005 ProQuest Info&Learning. All rts. reserv.

01690789 ORDER NO: AAD99-19644

HYBRID ENDOTRACHEAL TUBES (HYDROGEL, TRACHEAL TISSUE, BIOCOMPATIBILITY)

Author: SAKEZLES, CHRISTOPHER THOMAS

Degree: PH.D. Year: 1997

Corporate Source/Institution: UNIVERSITY OF FLORIDA (0070) Source: VOLUME 60/02-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 794. 129 PAGES

Intubation involves the placement of a **tube** into the tracheal lumen and is prescribed in any setting in which the **airway** must be stabilized

Serial 10/613860 March 31, 2005

or the patient anesthetized. The purpose of the endotracheal **tube** in these procedures is to maintain a viable **airway**, facilitate mechanical ventilation, allow the administration of anesthetics, and prevent the reflux of vomitus into the **lungs**. In order to satisfy these requirements a nearly **airtight seal** must be maintained between the **tube** and the tracheal lining. Most conventional endotracheal **tubes** provide this seal by employing a cuff that is inflated once the **tube** is in place. However, the design of this cuff and properties of the material are...

The complications associated with tracheal intubation may be reduced or eliminated by employing airway devices constructed from hydrogel materials. Hydrogels are a class of crosslinked polymers which swell in...

...and may contain more than 95% water by weight. For the current study, several prototype **airway** devices were constructed from hydrogel materials including poly(vinyl alcohol), poly(hydroxyethyl methacrylate), and poly...

## 12/3,K/4 (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

11898666 PMID: 9176621

A homemade modification of a spacer device for delivery of bronchodilator or steroid therapy in patients with tracheostomies.

Nakhla V

Department of Otolaryngology, Queen Elizabeth Hospital, Edgbaston, Birmingham, UK.

Journal of laryngology and otology (ENGLAND) Apr 1997, 111 (4) p363-5, ISSN 0022-2151 Journal Code: 8706896

Publishing Model Print

Document type: Case Reports; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Patients who have artificial **airways** and who concurrently suffer with chronic obstructive **airways** disease encounter problems when administering inhaled bronchodilator and corticosteroid drugs via the tracheostomy. This is...

... dose of inhaled drugs via the oropharyngeal route and it is impossible to obtain an **airtight seal** from the inhaler device mouthpiece to the tracheostomy **tube**. The author describes a simple, effective and cheap modification of a spacer device designed by a creative patient to facilitate delivery of the aerosol via the tracheostomy **tube** to overcome this problem.

; Adrenal Cortex Hormones--administration and dosage--AD; Aged; Humans; Lung Diseases, Obstructive--drug therapy--DT

#### 12/3,K/5 (Item 5 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

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Serial 10/613860 March 31, 2005

13775330\_ \_ PMID: 11437874

Minimal-flow anaesthesia with controlled ventilation: comparison between laryngeal mask airway and endotracheal tube.

Honemann C W; Hahnenkamp K; Mollhoff T; Baum J A

Klinik und Poliklinik fur Anasthesiologie und operative Intensivmedizin, Universitats Klinikum Munster, Germany.

European journal of anaesthesiology (England) Jul 2001, 18 (7) p458-66, ISSN 0265-0215 Journal Code: 8411711

Publishing Model Print

Document type: Clinical Trial; Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

... 1 L min(-1)) provide many advantages, including reduced cost, conservation of body heat and airway humidity. An airtight **seal** is airway device and the airway of the patient. essential between the Therefore, we investigated whether the airtight **seal** created by a laryngeal mask airway allows controlled ventilation of the lungs when the fresh gas flow is reduced to 0.5 L min(-1) and compared this with an endotracheal tube . METHODS: In a prospective clinical study, 207 patients were managed using a laryngeal mask or an endotracheal tube . After intravenous induction of anaesthesia and 15 min of high fresh gas flow, the flow was reduced to 0.5 L min(-1). The breathing system was monitored for leaks, and the patients were assessed for complications after airway removal and postoperative discomfort. RESULTS: Both the laryngeal allowed fresh gas flow reduction to 0.5 L mask and endotracheal tube min(-1) in 84.7% and 98.3% of cases respectively (small leaks: 12% tube ). Three patients with the laryngeal mask, 1.7% endotracheal laryngeal mask (3.3%) had airway leaks that were too large to permit any reduction in the fresh gas flow. CONCLUSIONS: The use of the laryngeal mask airway was more likely to be associated with a gas leak than use of an tube ; however, if modern anaesthesia machines and monitors endotracheal are used, in 96.7% of the patients...

...coughing and postoperative complaints (sore throat, swallowing problems) was higher after use of an endotracheal **tube** .

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005 File 149:TGG Health&Wellness DB(SM) 1976-2005/Mar W3 (c) 2005 The Gale Group File 148:Gale Group Trade & Industry DB 1976-2005/Mar 31 (c)2005 The Gale Group File 16:Gale Group PROMT(R) 1990-2005/Mar 31 (c) 2005 The Gale Group File 160:Gale Group PROMT(R) 1972-1989 (c) 1999 The Gale Group File 621:Gale Group New Prod. Annou. (R) 1985-2005/Mar 31 (c) 2005 The Gale Group File 649: Gale Group Newswire ASAP(TM) 2005/Mar 23 (c) 2005 The Gale Group 9:Business & Industry(R) Jul/1994-2005/Mar 30 File (c) 2005 The Gale Group File 369:New Scientist 1994-2005/Mar W2 (c) 2005 Reed Business Information Ltd. File 370:Science 1996-1999/Jul W3 (c) 1999 AAAS File 636:Gale Group Newsletter DB(TM) 1987-2005/Mar 31 (c) 2005 The Gale Group File 635:Business Dateline(R) 1985-2005/Mar 30 (c) 2005 ProQuest Info&Learning File 441:ESPICOM Pharm&Med DEVICE NEWS 2005/Feb W2 (c) 2005 ESPICOM Bus.Intell. File 98:General Sci Abs/Full-Text 1984-2004/Dec (c) 2005 The HW Wilson Co. 20:Dialog Global Reporter 1997-2005/Mar 31 (c) 2005 The Dialog Corp. Description Items Set CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-3976737 S1 ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ? 32372 AIRTIGHT OR AIR() TIGHT OR HERMETIC? OR IMPERMEAB? (1N) AIR \$2 683822 SEAL??? OR OCCLUS??? OR OCCLUD? S3 AIRWAY? ? S4 458565 (THORACIC OR CHEST) () WALL S5 3805 284708 LUNG OR LUNGS **S6 S7** S1(S)S2()S3(S)S4:S5(S)S6 7/3, K/1(Item 1 from file: 98) DIALOG(R) File 98:General Sci Abs/Full-Text (c) 2005 The HW Wilson Co. All rts. reserv. 04014415 (USE FORMAT 7 FOR H.W. WILSON RECORD NUMBER: BGS199014415 Mouse models of airway responsiveness: physiological basis of observed outcomes and analysis of selected examples using these outcome indicators. AUGMENTED TITLE: review Drazen, J. M Finn, P. W; De Sanctis, G. T. Annual Review of Physiology (Annu Rev Physiol) v. 61 ('99) p. 593-625 SPECIAL FEATURES: bibl il ISSN: 0066-4278 LANGUAGE: English

COUNTRY OF PUBLICATION: United States

WORD COUNT: 13751

Serial 10/613860 March 31, 2005

#### TEXT:

... air pressure is applied at the body surface, and the subsequent flow generated at the **airway** opening is measured. Mice must be restrained in a **tube** the internal diameter of which is slightly larger than that of the animal. The **tube** is equipped with a movable, cone-shaped, spring-loaded facemask that provides an **airtight seal** around the nose (41). The mask allows fresh air to be directed into the **lungs** by high-impedance bias flow and permits inspiratory and expiratory airflow to be recorded. The....

...relationship between the pressure applied at the body surface and the flow generated at the **airway** opening is used to calculate the pressure in phase with flow--i.e. total respiratory...

...mouse's spontaneous ventilation. This technique has been successfully used to assess the changes in  ${\tt airway}$  responsiveness resulting from systemic allergen sensitization and aerosol challenge (41).

Among the techniques that do...

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005 File 155:MEDLINE(R) 1951-2005/Mar W4 (c) format only 2005 The Dialog Corp. 5:Biosis Previews(R) 1969-2005/Mar W3 File (c) 2005 BIOSIS File 73:EMBASE 1974-2005/Mar W4 (c) 2005 Elsevier Science B.V. File 34:SciSearch(R) Cited Ref Sci 1990-2005/Mar W3 (c) 2005 Inst for Sci Info File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info File 94:JICST-EPlus 1985-2005/Feb W2 (c) 2005 Japan Science and Tech Corp (JST) File 95:TEME-Technology & Management 1989-2005/Feb W3 (c) 2005 FIZ TECHNIK \*File 95: Customers in Germany, Austria, and Switzerland should contact their local Dialog representative. File 99:Wilson Appl. Sci & Tech Abs 1983-2005/Feb (c) 2005 The HW Wilson Co. File 35:Dissertation Abs Online 1861-2005/Mar (c) 2005 ProQuest Info&Learning File 65:Inside Conferences 1993-2005/Mar W4 (c) 2005 BLDSC all rts. reserv. 6:NTIS 1964-2005/Mar W3 File (c) 2005 NTIS, Intl Cpyrght All Rights Res 8:Ei Compendex(R) 1970-2005/Mar W3 File (c) 2005 Elsevier Eng. Info. Inc. File 144:Pascal 1973-2005/Mar W3 (c) 2005 INIST/CNRS Items Description Set CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-3145371 ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ? 16916 AIRTIGHT OR AIR()TIGHT OR HERMETIC? OR IMPERMEAB?(1N)AIR S2 707132 SEAL??? OR OCCLUS??? OR OCCLUD? S3 341036 AIRWAY? ? S4 S5 37235 (THORACIC OR CHEST) () WALL S6 1718436 LUNG OR LUNGS **\$7** 240 FLUID()TIGHT S8 77 S7()S3 NOT S2()S3 S9 0 S1 AND S8 AND S4:S5 AND S6 67482 PLUG? ? S10 501 S11 S1 AND (S3 OR S10) AND S4:S5 AND S6 488 S11 NOT (S8 OR S2()S3) S12 S13 1129 S1(S)(S3 OR S10)(S)S4 S14 274 S1(S)(S3 OR S10)(S)S4:S5(S)S6 S15 266 S14 NOT (S7 OR S2)()S3 3719 (S3 OR S10) (3N) AIR S16 S17 5 S15(S)S16 RD (unique items) 18/6/3 (Item 3 from file: 5) BIOSIS NO.: 199293123771 PENETRATION OF WATER INTO BLIND-ENDED CAPILLARY TUBES AND ITS BEARING ON

THE FUNCTIONAL DESIGN OF THE LUNGS OF SOLDIER CRABS MICTYRIS-LONGICARPUS

1992

Serial 10/613860 March 31, 2005

18/3,K/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

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0014669484 BIOSIS NO.: 200400040241

Can Continuous Gas Inflow Compensate for Endotracheal Tube Cuff Leak Following Balloon Rupture?

AUTHOR: Gaucher Donald J (Reprint); Salem M Ramez (Reprint); Joseph Ninos J (Reprint)

AUTHOR ADDRESS: Department of Anesthesiology, Advocate Illinois Masonic Medical Center, Chicago, IL, USA\*\*USA

JOURNAL: Anesthesiology Abstracts of Scientific Papers Annual Meeting (2003): pAbstract No. A-1253 2003 2003

MEDIUM: cd-rom

CONFERENCE/MEETING: 2003 Annual Meeting of the American Society of Anesthesiologists San Francisco, CA, USA October 11-15, 2003; 20031011

SPONSOR: American Society of Anesthesiologists DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

- ... ABSTRACT: via a stab incision through the ETT wall. The top of the model trachea was sealed air tight around the ETT using a rubber membrane. A small piece of tubing also perforated the membrane and was connected to a water trap in order to detect...
- ...14G holes, respectively. No cuff blow out ever occurred as long as the IV extension **tubing** was kept open to atmosphere. The IV extension **tubing** is crucial for the system to obtain pressures high enough to resolve the cuff leaks...

18/3,K/2 (Item 2 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

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0013776083 BIOSIS NO.: 200200369594

Gravity effects on liquid plug transport and distribution in airway models

AUTHOR: Suresh Vinod (Reprint); Grotberg James

AUTHOR ADDRESS: Biomedical Engineering, Biomedical Engineering Department, University of Michigan, 2350 Hayward, 3304 G. G. Brown, Ann Arbor, MI, 48109, USA\*\*USA

JOURNAL: FASEB Journal 16 (5): pA877 March 22, 2002 2002

MEDIUM: print

CONFERENCE/MEETING: Annual Meeting of Professional Research Scientists on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002; 20020420

ISSN: 0892-6638

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract LANGUAGE: English

...ABSTRACT: involve the instillation of a liquid bolus into the trachea.

When the bolus forms an air -blown plug, optimal delivery of the surfactant or perfluorocarbon to various regions of the lung can depend on uniform dispersion through bifurcating airways. In higher generation

Serial 10/613860 March 31, 2005

airways gravitational and surface tension effects can influence plug rupture and plug shape, which in turn affects the mass split ratio at successive bifurcations. These effects are studied using a simplified theoretical model involving the quasi-steady motion of a liquid plug through a liquid-lined rigid cylindrical tube and bifurcation model. A matched asymptotic double expansion is used in the limit of small...

...and capillary numbers to determine the thickness of the trailing liquid film, shape of the **plug** and the pressure drop across it. It is found that rupture occurs when the pressure drop across the **plug** exceeds a critical value that depends on the Bond and capillary numbers. It is also ...

18/3,K/4 (Item 1 from file: 94)

DIALOG(R) File 94: JICST-EPlus

(c) 2005 Japan Science and Tech Corp(JST). All rts. reserv.

02811779 JICST ACCESSION NUMBER: 96A0676357 FILE SEGMENT: JICST-E Thoracoscopic Laser Ablation of Pulmonary Bullae in a Patient with Giant Unilateral Bullae and Bilateral Bullous Emphysema.

KURAMITSU SETSU (1); MORIMOTO MARIKO (1); YAMAMOTO TOMOHISA (1); SAKABE TAKEFUMI (1); SUGI KAZUO (1); OSHITA SHUZO (2)

(1) Yamaguchi Univ., Sch. of Med.; (2) Univ. of Tokushima, Sch. of Med. Nippon Rinsho Masui Gakkaishi (Journal of Japan Society for Clinical Anesthesia), 1996, VOL.16, NO.6, PAGE.512-516, FIG.1, REF.11

JOURNAL NUMBER: Y0691AAW ISSN NO: 0285-4945

UNIVERSAL DECIMAL CLASSIFICATION: 616.2-089

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Short Communication MEDIA TYPE: Printed Publication

...ABSTRACT: in 80-100% oxygen and additional fentanyl as required. A left-sided double-lumen endotracheal tube was inserted via direct laryngoscopy. Muscle relaxation was maintained with iv pancuronium. The lungs were ventilated using the Siemens Servo 900C ventilator, which provides pressure-controlled ventilation with high inspiratory flows. Continuous positive airway pressure of 1cm H2O was applied to the non-dependent lung. The PaO2 value was greater than 300mmHg during surgery. Postoperatively, the patient was maintained on...

...to clear sputum, a large bronchopleural fistulae occurred. An emergency open thoracotomy was performed to **seal** the large bronchopleural **air** leaks. Anesthesia was maintained with sevoflurane in oxygen and thoracic epidural block (1% mepivacaine). A left-sided double-lumen endotracheal **tube** was extubated in the operating theater after surgery. The patient subsequently reported improvement in symptoms...

Serial 10/613860 March 31, 2005 -File 149:TGG Health&Wellness DB(SM) 1976-2005/Mar W3 (c) 2005 The Gale Group File 148:Gale Group Trade & Industry DB 1976-2005/Mar 31 (c) 2005 The Gale Group File 16:Gale Group PROMT(R) 1990-2005/Mar 31 (c) 2005 The Gale Group File 160: Gale Group PROMT(R) 1972-1989 (c) 1999 The Gale Group File 621:Gale Group New Prod. Annou. (R) 1985-2005/Mar 31 (c) 2005 The Gale Group File 636:Gale Group Newsletter DB(TM) 1987-2005/Mar 31 (c) 2005 The Gale Group File 635:Business Dateline(R) 1985-2005/Mar 30 (c) 2005 ProQuest Info&Learning File 98:General Sci Abs/Full-Text 1984-2004/Dec (c) 2005 The HW Wilson Co. 9:Business & Industry(R) Jul/1994-2005/Mar 30 File (c) 2005 The Gale Group File 441:ESPICOM Pharm&Med DEVICE NEWS 2005/Feb W2 (c) 2005 ESPICOM Bus. Intell. File 369:New Scientist 1994-2005/Mar W2 (c) 2005 Reed Business Information Ltd. File 370:Science 1996-1999/Jul W3 (c) 1999 AAAS Items Description S1 2425735 CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ? 23327 AIRTIGHT OR AIR()TIGHT OR HERMETIC? OR IMPERMEAB?(1N)AIR S2 388980 SEAL??? OR OCCLUS??? OR OCCLUD? S3 S4 230485 AIRWAY? ? 3253 (THORACIC OR CHEST) () WALL S5 S6 162900 LUNG OR LUNGS 109 FLUID()TIGHT S7 328126 PLUG? ? 2401974 AIR S8 S9 S10 63 S7()S3 NOT S2()S3 S11 0 S1(S)S10(S)S4:S5(S)S6 S12 90 S1(S)S4:S5(S)S6(S)(S3 OR S8) S13 24 S9(S)S12 22 RD (unique items) S14 0 S15 S14/2004:2005 22 Sort S14/ALL/PD, A (Item 2 from file: 149) 16/8/2 DIALOG(R) File 149:(c) 2005 The Gale Group. All rts. reserv. 01101590 SUPPLIER NUMBER: 04546893 (USE FORMAT 7 OR 9 FOR FULL TEXT) Test your skill at troubleshooting chest tubes. 1986 WORD COUNT: 941 LINE COUNT: 00095 SPECIAL FEATURES: illustration; photograph DESCRIPTORS: Respiratory disease nursing -- Technique; Lung diseases; Pneumothorax -- Nursing SIC CODES: 8049 Offices of health practitioners, not elsewhere classified FILE SEGMENT: TI File 148

ASRC Searcher: Jeanne Horrigan

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16/8/5 (Item 5 from file: 149)

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01164580 SUPPLIER NUMBER: 08305349

Negative extrathoracic pressure in treatment of respiratory failure in infants and young children.

1989

SPECIAL FEATURES: illustration; table; graph

DESCRIPTORS: Lung diseases; Positive pressure respiration--Comparative method; Infants--Diseases; Artificial respiration--Comparative method

FILE SEGMENT: HI File 149

16/8/6 (Item 6 from file: 149)

DIALOG(R) File 149: (c) 2005 The Gale Group. All rts. reserv.

01256694 SUPPLIER NUMBER: 13228372 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Medical management and therapy of bronchopleural fistulas in the mechanically ventilated patient.

1990

WORD COUNT: 6486 LINE COUNT: 00555

SPECIAL FEATURES: illustration; table

DESCRIPTORS: Bronchi--Intubation; Fistula, Branchial cleft--Care and

treatment; Artificial respiration--Usage

FILE SEGMENT: HI File 149

16/8/8 (Item 8 from file: 149)

DIALOG(R) File 149:(c) 2005 The Gale Group. All rts. reserv.

01432676 SUPPLIER NUMBER: 14691235 (USE FORMAT 7 OR 9 FOR FULL TEXT) Bronchiolitis obliterans organizing pneumonia caused by Plasmodium vivax malaria.

1993

WORD COUNT: 2268 LINE COUNT: 00237

SPECIAL FEATURES: illustration; photograph; diagnostic image DESCRIPTORS: Malaria--Complications; Bronchiolitis--Diagnosis

FILE SEGMENT: HI File 149

16/8/9 (Item 9 from file: 149)

DIALOG(R) File 149: (c) 2005 The Gale Group. All rts. reserv.

01434411 SUPPLIER NUMBER: 14707330 (USE FORMAT 7 OR 9 FOR FULL TEXT) Humidification in the intensive care unit: prospective study of a new protocol utilizing heated humidification and a hygroscopic condenser humidifier.

1993

WORD COUNT: 5049 LINE COUNT: 00390

SPECIAL FEATURES: illustration; table; chart

Serial 10/613860 March 31, 2005

DESCRIPTORS: Humidity -- Control; Humidifiers -- Standards; Medical protocols --

Standards

FILE SEGMENT: HI File 149

16/8/10 (Item 10 from file: 149)

DIALOG(R) File 149:(c) 2005 The Gale Group. All rts. reserv.

01472095 SUPPLIER NUMBER: 14990753 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Being a sport with exercise-induced asthma.

1994

WORD COUNT: 1826 LINE COUNT: 00145

SPECIAL FEATURES: illustration; photograph

DESCRIPTORS: Asthma--Care and treatment; Exercise--Health aspects

FILE SEGMENT: MI File 47

16/8/11 (Item 11 from file: 149)

DIALOG(R) File 149:(c) 2005 The Gale Group. All rts. reserv.

01495176 SUPPLIER NUMBER: 15842435 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Thoracoscopic resection of bilateral metastatic sarcomas causing spontaneous pneumothorax.

1994

WORD COUNT: 1265 LINE COUNT: 00115

DESCRIPTORS: Sarcoma--Metastasis; Pneumothorax--Causes of; Thoracotomy--

Complications

FILE SEGMENT: HI File 149

16/8/12 (Item 12 from file: 149)

DIALOG(R) File 149:(c) 2005 The Gale Group. All rts. reserv.

01799025 SUPPLIER NUMBER: 20398232 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Facts about lymphangioleiomyomatosis (LAM). (Pamphlet)

1995

WORD COUNT: 2000 LINE COUNT: 00159

DESCRIPTORS: Health pamphlets; Lung diseases -- Diagnosis

FILE SEGMENT: HI File 149

16/8/13 (Item 13 from file: 149)

DIALOG(R)File 149:(c) 2005 The Gale Group. All rts. reserv.

01606501 SUPPLIER NUMBER: 17467976 (USE FORMAT 7 OR 9 FOR FULL TEXT) Cardiopulmonary effects of positive pressure ventilation during acute lung

injury.

1995
WORD COUNT: 6248 LINE COUNT: 00520

SPECIAL FEATURES: illustration; table; graph

DESCRIPTORS: Positive pressure respiration -- Physiological aspects; Lungs --

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\_\_ Wounds and injuries; Acute respiratory distress syndrome--Physiological aspects

FILE SEGMENT: HI File 149

#### 16/8/14 (Item 14 from file: 149)

DIALOG(R) File 149: (c) 2005 The Gale Group. All rts. reserv.

01606497 SUPPLIER NUMBER: 17467968 (USE FORMAT 7 OR 9 FOR FULL TEXT) Elevated imposed work of breathing masquerading as ventilator weaning intolerance.

1995

WORD COUNT: 3800 LINE COUNT: 00328

SPECIAL FEATURES: illustration; table; chart

DESCRIPTORS: Ventilator weaning -- Physiological aspects; Respiratory

insufficiency--Measurement FILE SEGMENT: HI File 149

#### 16/8/18 (Item 18 from file: 149)

DIALOG(R) File 149:(c) 2005 The Gale Group. All rts. reserv.

01777423 SUPPLIER NUMBER: 20842718 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Prolonged air leak following radical upper lobectomy: an analysis of
incidence and possible risk factors.

1998

WORD COUNT: 2616 LINE COUNT: 00247

SPECIAL FEATURES: table; illustration

DESCRIPTORS: Surgery--Complications; Lung cancer, Non-small cell--Surgery

FILE SEGMENT: HI File 149

#### 16/3,K/3 (Item 3 from file: 149)

DIALOG(R) File 149:TGG Health&Wellness DB(SM) (c) 2005 The Gale Group. All rts. reserv.

01150219 SUPPLIER NUMBER: 06707188 (USE FORMAT 7 OR 9 FOR FULL TEXT) Chest tube insertion.

Graber, Richard F.

Patient Care, v22, n15, p159(5)

Sept 30,

1988

PUBLICATION FORMAT: Magazine/Journal ISSN: 0031-305X LANGUAGE: English

RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 1440 LINE COUNT: 00160

You may feel a pop as the parietal pleura is punctured. 8. Aspirate as much air as possible with the 50mL syringe to relieve acute symptoms. In severe tension pneumothorax, allow the air to rush out of the catheter hub without extraction. 9. Once the patient is stabilized, prepare for chest tube insertion. Leave the plastic over-theneedle catheter in place while withdrawing the syringe and needle...

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...dressing may be placed over the plastic cannula left open to atmospheric pressure. Technique, chest **tube** insertion 1. The most commonly recommended insertion site is in the fifth intercostal space just anterior to the midaxillary line of the affected **lung** (see Figure 2). 2. Using sterile gloves, prepare the skin with antiseptic, and do the...

...the chest cavity. The latter technique may reduce the likelihood of pneumothorax after the chest **tube** is removed. ...to the superior edge of the rib in making the subcutaneous tunnel and placing the **tube** . 5: Enter the pleural cavity with the closed Kelly clamp, orienting the direction of insertion...

...screwlike movement (see Figure 3b). Control insertion depth by placing your middle finger on the **chest wall** to stop too deep a puncture. Expect a sudden drop in resistance and a pop...

...for adhesions or unanticipated findings such as the diaphragm. 7. If necessary before placing the **tube**, enlarge the opening by inserting the closed Kelly clamp, and opening and spreading it in...

...planes. 8. Use the second Kelly damp to close the proximal end of the chest **tube**. Gras the distal tip of the chest **tube** with the first Kelly clamp, and advance it through the incision, the subcutaneous tissue, and...

...pleura so the tip lies within the pleural cavity (see Figure 4). Note: Some chest tubes come with an intraluminal trocar inserter. These are not recommended because of a higher chance of inadvertent intrathoracic injury. 9. Withdraw the clamp, and advance the tube within the pleural cavity to the desired depth. Be sure all the holes in the tube are inside the chest. Look for fogging of the exit tube with respirations, or listen for air movement through the tube. 10. Connect the chest tube to the drainage system via plastic tubing, and set the device to get approximately - 20 cm of H20suction pressure. Air bubbles in the water of the chest draining unit during both inspiration and expiration confirm proper hookup (see Figure 5). ii. Secure the chest tube to the chest wall with skin suture, using a suture on either side of the incision and wrapping the long ends of each suture around the tube several times in crisscross fashion (see Figure 6). Apply an occlusive dressing with petrolatum gauze or petroleum jelly applied to sterile 4 x 4-in gauze...

...see Figure 7). 12. Obtain a chest X-ray to document proper positioning of the **tube** and reinflation of the **lung** . 13. When the procedure is complete, the patient and drainage unit should be observed regularly...

...should bubble consistently in both phases of respiration. When the fluid drainage trap fills, the tube leading to the chest should be clamped and the unit emptied or replaced and reconnected. When therapy is complete, the tube should be carefully removed to avoid recurring pneumothorax. Chest tube removal 1. Premedicate the patient with an analgesic to lessen discomfort on withdrawal. 2. Remove all dressings, including the petrolatum occlusive dressing. 3. Prepare the skin near the chest tube with antiseptic solution. 4. Cut the anchoring suture, leaving the chest tube in place. 5. Be sure the patient is alert and cooperative before removing the tube. He must follow directions carefully. 6. Using folded sterile petrolatum gauze in double or triple thickness, place the gauze on the skin

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over the chest tube. Cover the superior aspect of the entry site. 7. Instruct the patient to take a maximum inspiration and not to exhale until told. During inspiration, quickly twist and remove the tube with one hand, and use the other hand to cover the wound with the petrolatum...

...a slight circular motion to reapproximate the skin edges, and cover completely with the petrolatum **occlusive** dressing. 8. Cover the dressing with several thicknesses of sterile  $4 \times 4$ -in gauze...

...securely in place. 9. Using sterile scissors, cut off the distall -in of the chest **tube** tip and place it in a sterile culture **tube** for culture and susceptibility studies. lo. Obtain a chest X-ray study after the **tube** is removed. Possible complications, needle decompression \* Local cellulitis r \* Local hematoma \* Pleural infection . \* Internal mammary...

16/3,K/7 (Item 7 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01303365 SUPPLIER NUMBER: 11163584 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Heimlich valve treatment of Pneumocystis carinii-associated pneumothorax.

Driver, Albert G.; Peden, James G.; Adams, Harry G.; Rumley, Richard L.

Chest, v100, n1, p281(2)

July,
1991

PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional WORD COUNT: 943 LINE COUNT: 00114

... and pleurectomy after the pneumothoraces persisted with prolonged chest tube drainage. [5]

Short-term chest tube drainage alone was inadequate therapy for pneumothorax in our two patients. This was primarily due to an inability to fully expand the lung caused by bronchopleural fistulas. We were unable to fully inflate the lung despite suction pressure, preventing the visceral and parietal pleural surfaces from sealing off the air leak. Likewise, therapy for Pneumocystis in both our patients did not improve lung expansion. Our choice of therapy, with aerosolized pentamidine may not have been optimal due to inadequate penetration of the drug into atelectatic areas of lung. Coughing caused by airway irritation from pentamidine may aggravate the air leak and delay closure of the bronchopleural fistula. Three attempts at pleurodesis with tetracycline in

...Finally, as a last resort, Heimlich valves were attached to the ends of the chest tube. Therapy with Heimlich valves permitted ambulation and outpatient management in both of our patients. Pneumothoraces resolved over three to six weeks, and chest tubes were successfully removed from patient 1. This treatment provided patient 2 with one week of freedom from dyspnea at home. We suspect that malfunctioning chest tubes may have contributed to his death. ...7] By acting as a one-way valve, Heimlich flutter valves permit egress of pleural air while sealing the chest tube on inspiration. Attachment of a drainage bag to the valve permits collection of potentially infectious...

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(Item 15 from file: 149) 16/3,K/15 DIALOG(R) File 149:TGG Health&Wellness DB(SM) (c) 2005 The Gale Group. All rts. reserv.

(USE FORMAT 7 OR 9 FOR FULL TEXT) SUPPLIER NUMBER: 19365621 Interest of a therapeutic optimization strategy in severe ARDS. (acute respiratory distress syndrome)

Guinard, Nathalie; Beloucif, Sadek; Gatecel, Claire; Mateo, Joaquim; Payen,

Chest, v111, n4, p1000(8)

April,

1997

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692

LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 4728 LINE COUNT: 00518

just below the right atrium). The continuously rewarmed and heparinized blood was driven by an occlusive pump (COBE; Lakewood, Calif) through two silicone artificial membrane lungs (7 (m.sup.2) total membrane surface area (Ultrox I; Sei Med; Minneapolis)) used in...

...to remove (CO.sub.2) since membranes were ventilated with a heated humidified mixture of air and oxygen. Lungs were continuously maintained inflated by a permanent positive pressure associated with three to four mechanical cycles per minute with peak airway pressure limited to 40 to 45 cm (H.sub.2)O by pressure control. Mean airway pressure was kept similar to pre-(ECCO.sub.2)R value (de, close to the...

...2 L/min oxygen flow was added through a small catheter positioned in the tracheal tube , just above the carina, to cover the needs of whole body oxygen consumption. This average...

(Item 16 from file: 149) 16/3,K/16 DIALOG(R) File 149:TGG Health&Wellness DB(SM) (c) 2005 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 19453390 (USE FORMAT 7 OR 9 FOR FULL TEXT) Management of bronchopleural fistula with a variable-resistance valve and a single ventilator.

Carvalho, Paula; Thompson, William H.; Riggs, Rod; Carvalho, Camilo; Charan, Nirmal B.

Chest, v111, n5, p1452(3)

May,

1997

PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English

RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 1889 LINE COUNT: 00159

improvement in the air leak with these maneuvers.

On the 2nd hospital day, a continuous air leak was present from both chest tubes . Pressure control ventilation (now at 19 cm (H.sub.2)O to the right lung and 26 cm (H.sub.2)O to the left) resulted in exhaled ASRC Searcher: Jeanne Horrigan Serial 10/613860

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tidal volumes of approximately 50 to S0 mL from the right <code>lung</code> and approximately 300 mL from the left. Arterial blood gas levels showed a pH of...

...0.5). At this point, a variable-resistance valve was inserted online in the endotracheal **tube** lumen to the right **lung** and, through a Y-connector, the entire system was connected to a single ventilator (Puritan-Bennett 7200A) in order to provide synchronized ILV and, yet, prevent excessive pressures in the **lung** with the BPF. The details of this technique have previously been described.(3) The patient...

...set tidal volume, 400 mL; peak flow, 60L/min; (FIO.sub.2), 0.5. The airway pressure and volume were controlled by opening the valve (from 100% occlusion ) and titrating the degree of occlusion to obtain the desired airway pressures and tidal volumes distal to the valve (measured between the valve and the endotracheal tube ). As the valve was progressively occluded , resulting in a decrease in peak airway pressure in the right lung , the airway pressure in the left lung increased by an average of 4 to 9 cm (H.sub.2)O. On these settings, the results were as follows: right lung --average exhaled tidal volume was 80 mL, and peak airway pressure was 16 cm (H.sub.2)0; left lung: average exhaled tidal volume was 300 mL, and peak airway pressure was 30 cm (H.sub.2)O. The ventilator tubing (Respi-Flex Ventilator Circuits) compliance averaged 3.3 mL/cm (H.sub.2)0. The air leak from the apical chest tube ceased entirely. The leak from the posterior chest tube decreased and was now only present during inspiration. Arterial blood gas levels 1 h following...2), 0.5). The patient was maintained on a single ventilator with a bifurcated endotracheal tube and the variable-resistance valve in place for the next 3 days, during which time the air leak ia the BPF slowly decreased and ultimately resolved. He was then reintubated w th a standard single-lumen endotracheal tube and maintained on the ventilator until he clinically improved.

DISCUSSION

The management of severe unilateral...

...been tested in an animal model of BPF to demonstrate its efficacy in allowing differential <code>lung</code> ventilation, in a synchronized fashion, with the use of one ventilator. With a double-lumen endotracheal <code>tube</code>, the valve provides variable resistance to the lumen of the <code>tube</code> to one <code>lung</code> and, thus, controls the volume and <code>airway</code> pressure to that <code>lung</code>. We found that it effectively diverts a certain percentage of the ventilator-delivered tidal volume to the <code>lung</code> which is predominantly responsible for gas exchange, decreases the <code>airway</code> pressures to the injured <code>lung</code>, and, hence, decreases the <code>air</code> leak through an experimental BPF.(3) The technique is comparatively simple and requires a less...

...flow rates by regulating a single valve to an optimal point between 0 and 100% occlusion. Other advantages of this method include a reduction in cost and improved ease of ventilator...

16/3,K/17 (Item 17 from file: 149)
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01703100 SUPPLIER NUMBER: 19553214 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Management of a giant fluid-filled bulla by closed-chest thoracostomy tube
drainage.

Kirschner, Lawrence S.; Stauffer, William; Krenzel, Charles; Duane, Peter G.

Chest, v111, n6, p1772(3)

June,

1997

PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 1395 LINE COUNT: 00115

- ... of the chest showed the fluid in the cavity to form acute angles with the **chest wall**, suggesting that fluid was in the **lung** and not in the pleural space. Finally, a 24F thoracostomy **tube** placed into the right pleural cavity drained serosangineous fluid but did not drain the fluid...
- ...placed into the bulla under fluoroscopic guidance and attached to a drainage unit under water <code>seal</code> . No <code>air</code> leak was observed coming from the water <code>seal</code> , suggesting that there was no communication of the bulla with the tracheobronchial tree. However, the...
- ...was only partially drained; therefore, suction at 10 cm water pressure was applied to the **tube** which led to drainage of approximately 500 mL of cloudy yellowish-green fluid and to...
- ...and because there was concern about producing a percutaneous fistula in the bulla, the chest **tube** was removed. A subsequent radiograph and CT scan of the chest demonstrated a near-complete...

16/3,K/19 (Item 19 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01813510 SUPPLIER NUMBER: 53545127 (USE FORMAT 7 OR 9 FOR FULL TEXT) Bronchopleural Fistula Resulting From the Use of a Thoracic Vent(\*): A Case Report and Review.

Jones, Alan E.; Knoepp, Louis F.; Oxley, D. Davidson

Chest, 114, 6, 1781(1)

Dec,

1998

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 1835 LINE COUNT: 00159

pneumothorax usually is based on the presence of symptoms, size, evidence of tension pneumothorax, and air leak. Traditional therapy has included observation, tube thoracostomy, and more recently, needle aspiration. Each of these has major advantages and disadvantages. Tube thoracostomy necessitates the connection of the inserted drainage tube to an underwater seal device, immobilization, hospitalization, and patient discomfort. (3) It, however, remains the treatment of choice for...

...therapy, is somewhat effective for acute respiratory distress. However,

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-it offers no protection against persistent airway leak and the development of tension pneumothorax.(2) Complications associated with the procedures just noted, although rare, oftentimes are significant. Reported complications of tube thoracostomy include lung laceration, diaphragm laceration, liver laceration, infection, and hemothorax.(4) Complications of needle aspiration include hemothorax...

16/3,K/20 (Item 20 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01813499 SUPPLIER NUMBER: 53545116 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Preoperative Diagnosis With Video-Assisted Thoracoscopy With Miniaturized
Endoscopes in General Thoracic Surgery(\*): A Preliminary Study.

Nakamoto, Kembu; Maeda, Masazumi; Okamoto, Taku; Kameyama, Kohtaro; Sugita, Ayanori; Hayashi, Eiichi

Chest, 114, 6, 1749(1)

Dec,

1998

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 4302 LINE COUNT: 00381

... on the chest CT scan. A 14-gauge angiocatheter connected to a glass syringe containing **air** was used to puncture the chest wall at the same site and to gradually access the parietal pleura. The **air** in the glass syringe was passively absorbed when the needle tip entered the pleural cavity...

...connected to a video system was inserted via the trocar to observe the target. When **lung** collapse was not enough for observation of the pleural cavity, especially in patients with pulmonary...

...pleural color, pleural indentation, camel hump, (6) and palpation with a metallic probe or homemade **lung** forceps designed to pass through the small chest hole (Fig 2) inserted from an additional...

...needle biopsy was tried again. After the lesions from which biopsy specimens were removed were **sealed** with blood coagulation, the **lung** was reinflated by withdrawal of the intrapleural **air**; after this, the scope and trocars were removed with a finger pressed to the port. Skin incisions from the 5-mm trocar were **sealed** with a single stitch or tape. No chest drainage **tube** was inserted in patients who were receiving local anesthesia. A mild sedation with 15 mg...

16/3,K/21 (Item 21 from file: 98)
DIALOG(R)File 98:General Sci Abs/Full-Text
(c) 2005 The HW Wilson Co. All rts. reserv.

04014415 H.W. WILSON RECORD NUMBER: BGS199014415 (USE FORMAT 7 FOR FULLTEXT)

Mouse models of airway responsiveness: physiological basis of observed outcomes and analysis of selected examples using these outcome indicators.

Serial 10/613860 March 31, 2005

-AUGMENTED TITLE: review ...

Drazen, J. M

Finn, P. W; De Sanctis, G. T

Annual Review of Physiology (Annu Rev Physiol) v. 61 ('99) p. 593-625

SPECIAL FEATURES: bibl il ISSN: 0066-4278

LANGUAGE: English

COUNTRY OF PUBLICATION: United States

WORD COUNT: 13751

(USE FORMAT 7 FOR FULLTEXT)

#### TEXT:

... derived from similar techniques used in humans (38) and larger animals (39, 40). An oscillating air pressure is applied at the body surface, and the subsequent flow generated at the airway opening is measured. Mice must be restrained in a tube the internal diameter of which is slightly larger than that of the animal. The tube is equipped with a movable, cone-shaped, spring-loaded facemask that provides an airtight seal around the nose (41). The mask allows fresh air to be directed into the lungs by high-impedance bias flow and permits inspiratory and expiratory airflow to be recorded. The rear chamber is sealed to a louspeaker through which the investigator can systematically vary the pressure at the body...

...relationship between the pressure applied at the body surface and the flow generated at the **airway** opening is used to calculate the pressure in phase with flow--i.e. total respiratory...

...mouse's spontaneous ventilation. This technique has been successfully used to assess the changes in **airway** responsiveness resulting from systemic allergen sensitization and aerosol challenge (41).

Among the techniques that do. . .

16/3,K/22 (Item 22 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01974646 SUPPLIER NUMBER: 71403720 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Management of Spontaneous Pneumothorax(\*).

Baumann, Michael H.; Strange, Charlie; Heffner, John E.; Light, Richard; Kirby, Thomas J.; Klein, Jeffrey; Luketich, James D.; Panacek, Edward A.; Sahn, Steven A.

Chest, 119, 2, 590

Feb,

2001

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 8465 LINE COUNT: 00855

... Large Pneumothoraces: Clinically stable patients with large pneumothoraces should undergo a procedure to reexpand the **lung** and should be hospitalized in most instances (very good consensus). The **lung** should be reexpanded by using a small-bore catheter ((is less than or equal to) 14F) or placement of a 16F to 22F chest **tube** (good consensus). Catheters

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or tubes may be attached either to a Heimlich valve (good consensus) or to a water 1seal device (good consensus) and may be left in place until the lung expands against the chest wall and air leaks have resolved. If the lung fails to reexpand quickly, suction should be applied to a water-seal device. Alternatively, suction may be applied immediately after chest tube placement for all patients managed with a water seal system (some consensus).

Reliable patients who are unwilling to undergo hospitalization may be discharged home...

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005 File 155:MEDLINE(R) 1951-2005/Mar W4 (c) format only 2005 The Dialog Corp. 5:Biosis Previews(R) 1969-2005/Mar W3 File (c) 2005 BIOSIS File 73:EMBASE 1974-2005/Mar W4 (c) 2005 Elsevier Science B.V. File 34:SciSearch(R) Cited Ref Sci 1990-2005/Mar W3 (c) 2005 Inst for Sci Info File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info File 94:JICST-EPlus 1985-2005/Feb W2 (c) 2005 Japan Science and Tech Corp (JST) File 35:Dissertation Abs Online 1861-2005/Mar (c) 2005 ProQuest Info&Learning Items Description 300641 CATHETER? ? S1 7574 AIRTIGHT OR (AIR OR FLUID) () TIGHT OR HERMETIC? S2 588347 SEAL??? OR PLUG? ? OR OCCLUS??? OR OCCLUD? S3 332602 AIRWAY? ? OR (THORACIC OR CHEST) () WALL? ? S4 1512727 LUNG OR LUNGS S5 `845652 AIR S6 2010836 CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ? S8 275190 S1 NOT S7 S9 0 S8 AND S2()S3 AND S4 AND S5 S10 238 S8 AND S4 AND S5 AND S3 21 S6 AND S10 S11 17 RD (unique items) S12 0 S12/2004:2005 S13 17 **S14** Sort S12/ALL/PY,A 14/6/1 (Item 1 from file: 73) 00747556 EMBASE No: 1977092930 Effects of COinf 2 on pulmonary air flow resistance in the duck 1976 14/6/5 (Item 5 from file: 94) 01287465 JICST ACCESSION NUMBER: 91A0489203 FILE SEGMENT: JICST-E Measurements of respiratory function in the rat., 1991 (Item 6 from file: 34) 14/6/6 01159651 Genuine Article#: GA420 Number of References: 31 Title: LUNG EDEMA FORMATION FOLLOWING INHALATION INJURY - ROLE OF THE BRONCHIAL BLOOD-FLOW (Abstract Available) 14/6/7 (Item 7 from file: 155) 09661980 PMID: 1782943 Cardiopulmonary effects of constant-flow ventilation in experimental myocardial ischaemia. Nov 1991

Estimating left ventricular filling pressure during positive

14/6/8

09329043 PMID: 1986680

end-expiratory pressure in humans.

(Item 8 from file: 155)

Serial 10/613860 March 31, 2005

- -Jan -1991- -

14/6/10 (Item 10 from file: 155)

10160213 PMID: 8482640

Validity of the esophageal balloon technique at high frequencies.

Mar 1993

14/6/11 (Item 11 from file: 155)

10100879 PMID: 8444728

Airway and vascular effects of 8-epi-prostaglandin F2 alpha in isolated perfused rat  $\mbox{\tt lung}$  .

Jan 1993

14/6/13 (Item 13 from file: 5)

0013073951 BIOSIS NO.: 200100245790

COX-1 gene transfection attenuates pulmonary vascular response to a thromboxane analog in isolated-perfused rat lungs 2001

14/6/16 (Item 16 from file: 34)

11481448 Genuine Article#: 658RA Number of References: 26

Title: Nitric oxide increases dramatically in air exhaled from lung regions with occluded vessels (ABSTRACT AVAILABLE)

Publication date: 20030300

14/3,K/3 (Item 3 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0002145069 BIOSIS NO.: 197763065925

REFLEX CONTROL OF EXPIRATORY AIR FLOW AND DURATION

AUTHOR: REMMERS J E; BARTLETT D JR

JOURNAL: Journal of Applied Physiology 42 (1): p80-87 1977

ISSN: 0021-8987

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: Unspecified

ABSTRACT: Unanesthetized, unrestrained cats were studied repeatedly after placement of a permanent tracheostomy, **catheters** for respiratory pressure measurements, and respiratory muscle EMG [electromyogram] electrodes. The tracheostomy was opened or...

- ...mechanism. Opening the tracheostomy reduced tracheal pressure to 0 and diverted flow from the upper **airway**; closing the tracheostomy reestablished the normal pathway for airflow. Opening the tracheostomy during expiration evoked...
- ...responses which, in each case, acted to offset loss of expiratory braking by the upper airway. Occlusion of the tracheostomy during expiration produced the opposite responses. Responses to tracheostomy opening usually overcompensated for the loss of upper airway resistance, suggesting that extrathoracic tracheal receptors may participate in tracking. Changes in the expiratory time course of lung volume were accompanied by changes in the duration of expiration. These triggering responses operate independently...

# 14/3, K/4 (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

Serial 10/613860 March 31, 2005

(c) format only 2005 The Dialog Corp. All\_rts.reserv.

07808030 PMID: 3819990

Surgical management of neonatal interstitial emphysema.

Zerella J T; Trump D S

Journal of pediatric surgery (UNITED STATES) Jan 1987, 22 (1) p34-7, ISSN 0022-3468 Journal Code: 0052631

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

... interstitial emphysema in our newborn nursery were treated with open operative procedures to remove interstitial **air**. Thirty-one were critically ill newborns with severe progressive pulmonary interstitial emphysema treated with pleurotomies...

... in the 31 patients. All of the 31 patients underwent aggressive medical management to reduce airway pressure before resorting to operation. Ventilator manipulations, selective bronchial intubation, Forgerty catheter occlusion of the bronchus, and percutaneous lung needling were among the methods used to reduce emphysema in these patients. The operation for...

# 14/3,K/9 (Item 9 from file: 94)

DIALOG(R) File 94: JICST-EPlus

(c)2005 Japan Science and Tech Corp(JST). All rts. reserv.

01496959 JICST ACCESSION NUMBER: 92A0179730 FILE SEGMENT: JICST-E

A Case of Bronchopleural Fistula Successfully Treated by Occlusion with Laminaria.

NISHIYAMA TOMOKI (1); TAKIMOTO HIDETAKA (1); KONISHI HIDEKI (1); SETO KOZO (1); TSUKAZAKI TAKASHI (1); NAKAGAWA JUNPEI (1)

(1) Kagawa Prefect. Central Hospital

ICU to CCU(Japanese Journal of Intensive Care Medicine), 1992, VOL.16,NO.1, PAGE.69-74, FIG.8, REF.13

JOURNAL NUMBER: Z0581BAW ISSN NO: 0389-1194

UNIVERSAL DECIMAL CLASSIFICATION: 616.23 616.2-08

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

ABSTRACT: A severe case of bronchopleural fistula successfully treated by occlusing it with a laminaria is reported. The patient was a 48-year-old man with severe tetanus. He had hemo-and pneumothorax after insertion of a central venous catheter through the subclavian vein. Bronchopleural fistula developed at the right B4, 5 with pyothorax. Bilateral...

...after a trial for lobectomy in the lateral position. Arterial oxygen tensionbecame very low and air leak from the fistula was very remarkable. Operation was impossible because of poor respiratory function...

...gelatin sponge and fibrin glue was tried at right B4, 5 using a flexible fiberscope. Air leak diminished and arterial oxygen tension improved, but this condition continue only for a few hours. On the 34th day a moderately swelled laminaria was used to occlude the fistula under bronchoscopic observation. About 20 minutes after the procedure, blood pressure and airway pressure increased suddenly, which were

Serial 10/613860 March 31, 2005

- considered to be an allergic reaction. But air leak\_diminished and arterial oxygen tension improved and the patient was successfully weaned off from...

...DESCRIPTORS: catheter;

... BROADER DESCRIPTORS: lung surgery

### 14/3,K/12 (Item 12 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 The Dialog Corp. All rts. reserv.

10702597 PMID: 8087331

Collateral ventilation and gas exchange in emphysema.

Morrell N W; Wignall B K; Biggs T; Seed W A

Department of Medicine, Charing Cross and Westminster Medical School, London, United Kingdom.

American journal of respiratory and critical care medicine (UNITED STATES)
Sep 1994, 150 (3) p635-41, ISSN 1073-449X Journal Code: 9421642
Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

Resistance to collateral flow of gas is high in the normal human **lung** but may be lower in emphysema. However, the contribution of collateral ventilation to gas exchange...

... with our previous findings in 12 normal subjects. To assess collateral flow, a balloon-tipped catheter with a lumen that opened distal to the balloon was inflated in segmental bronchi during fiberoptic bronchoscopy. Respiratory gas tensions were sampled by mass spectrometer from beyond the occlusion via the catheter lumen. Subjects breathed air until occlusion was established and then switched to 79% helium/21% oxygen. The rate of rise of helium concentration was measured within occluded segments and used as an index of collateral ventilation. The mean (+/- SEM) rate of rise...

...with normal subjects (0.8 +/- 0.3%/min) (p = 0.009). The mean PO2 within occluded segments was similar in normal subjects and emphysema patients: 45.4 +/- 1.8 mm Hg and 44.8 +/- 3.6 mm Hg, respectively. Mean PCO2 within occluded segments was lower in patients (40.1 +/- 1.9 mm Hg) than in normal subjects...

... a positive correlation between rate of rise of helium concentration and final PO2 within an **occluded** segment (r = 0.73; p = 0.02).(ABSTRACT TRUNCATED AT 250 WORDS)

; Adult; Aged; Aged, 80 and over; Airway Resistance--physiology--PH; Bronchoscopy; Fiber Optics; Helium--physiology--PH; Humans; Lung --physiopathology--PP; Lung --radiography--RA; Lung Diseases, Obstructive--physiopathology--PP; Lung Diseases, Obstructive --radiography--RA; Middle Aged; Pulmonary Emphysema--radiography--RA; Reference Values; Respiratory Function Tests...

# 14/3,K/14 (Item 14 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0014142275 BIOSIS NO.: 200300100994

Comparative Study between Esophageal and Pleural Pressure in Anesthetized Humans at Different Levels of PEEP.

AUTHOR: Fernandes Claudia R (Reprint); Auler Jose Otavio C (Reprint)

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005

.AUTHOR ADDRESS: Anesthesiology, Hospital das\_Clinicas FMUSP, Sao Paulo, Brazil\*\*Brazil

JOURNAL: Anesthesiology Abstracts of Scientific Papers Annual Meeting (2001): pAbstract No. A-1345 2002 2002

MEDIUM: cd-rom

CONFERENCE/MEETING: 2001 Annual Meeting of the American Society of Anesthesiologists New Orleans, LA, USA October 13-17, 2001; 20011013

SPONSOR: American Society of Anesthesiologists Inc.

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: Introduction: The majority of the studies related to respiratory mechanics ( chest wall and lungs ) are based on estimative of pleural pressure (Ppl) obtained from esophageal pressure (Pes). However, direct

...breaths/min. Esophageal pressure (Pes) was recorded using a thin 9cm-long balloon, which was sealed over one end of a polyethylene catheter, the other end was connected to a spectramed P23XL transducer. The balloon was located in the conventional position 10cm above cardia and all measurements were made with 1ml of air in the balloon. Pleural pressure was recorded from a long drain with several side holes...

...ray film was performed for position confirmation the balloon and drain. The technique of rapid **airway occlusion** during constant-flow inflation was used. All signals were amplified (Gould, Cleveland, USA), recorded and...

DESCRIPTORS:

ORGANISMS: PARTS ETC: chest wall; ... lung --

# 14/3,K/15 (Item 15 from file: 73)

DIALOG(R) File 73: EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

12036106 EMBASE No: 2003139599

Anaesthetic management in a case of a type IV laryngotracheo-oesophageal cleft Fernandez A.; Jerez A.; Falcone N.

Dr. A. Fernandez, Dept. Anestecia Pediatrica, Hospital U. Doce de Octubre, Av Andelucia Km 5.4, 28041 Madrid Spain

AUTHOR EMAIL: fdezba@yahoo.es

Paediatric Anaesthesia ( PAEDIATR. ANAESTH. ) (France) 2003, 13/3 (270-273)

CODEN: PAANF ISSN: 1155-5645 DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 18

...Jackson-Rees circuit. To prevent the stomach from filling up with anaesthetic gases, a Foley catheter was placed orally into the stomach. The Foley balloon was 'inflated and retracted until it sealed the gastro-oesophageal junction. Tracheal intubation was performed after bronchoscopy to allow suture of the stomach into two chambers. Oxygenation was adequate with no air leakage, with spontaneous ventilation. The Foley catheter was removed afterwards and the patient awakened. We review the literature on different ways of managing the airway in these cases and protecting it from gastric aspiration during ventilation.

MEDICAL DESCRIPTORS:

bronchoscopy; pediatric anesthesia; anesthesia induction; lung ventilation; balloon catheter; lower esophagus sphincter; endotracheal

Serial 10/613860 March 31, 2005

-intubation; stomach suction; human; female; case report; newborn; article; priority journal

14/3,K/17 (Item 17 from file: 94)

DIALOG(R) File 94: JICST-EPlus

(c)2005 Japan Science and Tech Corp(JST). All rts. reserv.

05407734 JICST ACCESSION NUMBER: 03A0191813 FILE SEGMENT: JICST-E

Bronchoscopic Occlusion Method: Surgical Applications for TEF Occlusion and Lung Lobectomy.

IKEBUKURO KEN'ICHI (1); KANEKO MICHIO (1); HIRAI MISAKO (1); YOTSUMOTO KATSUMI (1); KUDO SUMI (1); MATOBA KIMIO (1); WATANABE MIHO (1)

(1) Tsukubadai Shonigeka

Nippon Shoni Geka Gakkai Zasshi (Journal of the Japanese Society of Pediatric Surgeons), 2003, VOL.39, NO.1, PAGE.90-96, FIG.4, TBL.2, REF.13

JOURNAL NUMBER: Z0037BAQ ISSN NO: 0288-609X UNIVERSAL DECIMAL CLASSIFICATION: 616.2-089

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

ABSTRACT: Purpose: Respiratory management of C-type esophageal atresia sometimes becomes difficult due to air leakage through the tracheoesophageal fistula (TEF). Pediatric pneumonectomy can also become complicated due to the lack of a device small enough for diverted ventilation. To address these issues, we occluded the TEF or lobar bronchus with a Fogarty catheter through a bronchoscope. These cases were reviewed. Methods/Results: We treated five patients with C-type esophageal atresia and eight with cystic lung disease. Tracheoesophageal fistula! Prior to surgery, a Fogarty catheter was inserted into the lower esophagus through the TEF under bronchoscopic observation, and a ballon was inflated. Thereafter, only the bronchoscope was withdrawn, and endotracheal intubation was performed. The Fogarty catheter was removed when the TEF was secured during the surgery. For this bronchoscopic procedure, 5.6 min was used on average. With this occlusion , air leakage through the TEF during surgery was completely controlled. Lobectomy! A Fogarty catheter was placed in the pathologic lobar bronchus. The ballon was inflated to prevent purulent sputum...

...of cysts. For this bronchoscopic procedure, 7.5 min was used on average. With this occlusion, expansion of the cystic lesion in the lungs was completely controlled during surgery. Conclusions: Occlusion of the TEF or the bronchus using a Fogarty catheter through the trachea is a simple and safe procedure that can maintain stable ventilation during...

...DESCRIPTORS: balloon catheter;

...IDENTIFIERS: airway obstruction

...BROADER DESCRIPTORS: lung disease...

... catheter ; ...

... lung surgery

Serial 10/613860 March 31, 2005

```
File-149:TGG Health&Wellness DB(SM) 1976-2005/Mar W3
         (c) 2005 The Gale Group
File 98:General Sci Abs/Full-Text 1984-2004/Dec
         (c) 2005 The HW Wilson Co.
Set
        Items
               Description
                CATHETER? ?
S1
        11683
                AIRTIGHT OR (AIR OR FLUID) () TIGHT OR HERMETIC?
S2
          942
S3
        23265
                SEAL??? OR PLUG? ? OR OCCLUS??? OR OCCLUD?
        15471
S4
                AIRWAY? ? OR (THORACIC OR CHEST) () WALL? ?
        51271 LUNG OR LUNGS
S5
S6
        55436
                AIR
S7
        69253 CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-
             ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ?
S8
       7106 S1 NOT S7
S9 .
            1
                S8 (S) S2 () S3 (S) S4 (S) S5
S10
           10
                S8(S)S3(S)S4(S)S5
               S10 NOT S9
S11
           9
S12
            8
                RD (unique items)
            0
                S12/2004:2005
S13
S14
                Sort S12/ALL/PD, A
           (Item 1 from file: 149)
9/3,K/1
DIALOG(R) File 149:TGG Health & Wellness DB(SM)
(c) 2005 The Gale Group. All rts. reserv.
             SUPPLIER NUMBER: 12339437
01359922
                                          (USE FORMAT 7 OR 9 FOR FULL TEXT)
Continuous negative extrathoracic pressure ventilation, lung water volume,
  and central blood volume: studies in dogs with pulmonary edema induced by
  oleic acid. (Laboratory and Animal Investigations)
Kudoh, Ichidai; Andoh, Tomio; Doi, Hisae; Kaneko, Kazuhiro; Okutsu, Yoshito
; Okumura, Fukuichiro
Chest, v101, n2, p530(4)
Feb, 1992
PUBLICATION FORMAT: Magazine/Journal
                                       ISSN: 0012-3692 LANGUAGE: English
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
WORD COUNT:
             2953
                     LINE COUNT: 00217
        bromide (40 [mu]g/kg/h) throughout the experiment.[14] Two
balloon-tipped pulmonary artery catheters (Swan-Ganz 7F; Edwards
Laboratories) were introduced from a femoral vein; one was placed so ...
...occlusion pressure could easily be obtained, and the other was in the
right atrium. A catheter (Elecath; 40 cm; Electro- Catheter Corp) was
inserted through the femoral artery for measuring EVLW and also was used
for measuring arterial blood pressure and sampling blood. A
transducer-tipped pressure monitoring thermodilution catheter (7F; Camino
Laboratories model 1140-7) was placed in the right thoracic cavity through
            wall for measurement of Ppl. The lungs were hyperinflated
to expel intrapleural air, and the chest was closed in layers for an
         seal . The chest was considered "closed" when no further air
could be evacuated through the catheter .
      To apply negative body surface pressure to the chest and upper
abdomen, we fabricated an ...
           (Item 4 from file: 149)
DIALOG(R) File 149:(c) 2005 The Gale Group. All rts. reserv.
```

01740374 SUPPLIER NUMBER: 20132295 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Serial 10/613860 March 31, 2005

# Pulmonary cholesterol crystal embolization.

1997

WORD COUNT: 4114 LINE COUNT: 00352 SPECIAL FEATURES: photograph; illustration

DESCRIPTORS: Atheroembolism--Diagnosis; Hemorrhage--Causes of; Lung

diseases--Diagnosis
FILE SEGMENT: HI File 149

# 14/8/6 (Item 6 from file: 98)

DIALOG(R) File 98:(c) 2005 The HW Wilson Co. All rts. reserv.

04024818 H.W. WILSON RECORD NUMBER: BGS199024818

Inducible NO synthase inhibition attenuates shear stress-induced pulmonary vasodilation in the ovine fetus.

**DESCRIPTORS:** 

Nitric oxide synthase; Vasodilation; Lungs--Blood flow; Stress (Biology).
Mar. 1999 pt1 (19990300)

### 14/3,K/1 (Item 1 from file: 149)

DIALOG(R) File 149:TGG Health & Wellness DB(SM)

(c) 2005 The Gale Group. All rts. reserv.

01431510 SUPPLIER NUMBER: 14295425 (USE FORMAT 7 OR 9 FOR FULL TEXT) Fetal surgery.

Harrison, Michael R.

The Western Journal of Medicine, v159, n3, p341(9)

Sent 1993

mechanics.

PUBLICATION FORMAT: Magazine/Journal ISSN: 0093-0415 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional

WORD COUNT: 7045 LINE COUNT: 00620

... 1993; 2:129-135 [31.] Manning FA, Hanison MR, Rodeck CH, et al: Special report: Catheter shunts for fetal hydronephrosis and

hydrocephalus. N Engl J Med 1986; 315:336-340 [32...

...108 [36.] Adzick NS, Hu LM, Davies P, Flake AW, Reid LM, Harrison MR: Compensatory lung growth after pneumonectomy in the fetus. Surg Forum 1986; 37:648 [37.] Harrison MR, Adzick...

...NS, Harrison MR, Flake AW, et al: Fetal surgery for cystic adenomatoid malformation of the <code>lung</code> . J Pediatr Surg 1993; 28:806-812 [39.] Adzick NS, Vacanti JP, Lillehei CW, O...hernia. J Pediatr Surg, in press [50.] Hedrick MH, Estes JM, Sullivan KM, et al: <code>Plug</code> the <code>lung</code> until it grows ( <code>PLUG</code> ): A new method to treat congenital diaphragmatic hernia in utero. J Pediatr Surg, in press...

...syndrome. Contemp Obstet Gynecol 1992; 37:30-47 [58.] Porreco RP, Barton SM, Haverkamp AD: Occlusion of umbilical artery in acardiac, acephalic twin. Lancet 1991; 337:326-327 [59.] De Lia JE, Cruikshank DP, Keye WR: Fetoscopic neodymium: YAG laser occlusion of placental vessels in severe twin-twin transfusion syndrome. Obstet Gynecol 1990; 75:1046-1053...
...Ferro M, Hedrick MH, Flake AW, Harrison MR, Adzick NS: Prenatal

...Ferro M, Hedrick MH, Flake AW, Harrison MR, Adzick NS: Prenatal diagnosis of congenital high **airway** obstruction (CHAOS): Potential for perinatal intervention. J Pediatr Surg, in press [69.] Hallock GG, Rice...

# 14/3,K/2 (Item 2 from file: 149)

DIALOG(R) File 149:TGG Health&Wellness DB(SM)

(c) 2005 The Gale Group. All rts. reserv.

01434417 SUPPLIER NUMBER: 14707346 (USE FORMAT 7 OR 9 FOR FULL TEXT) • Effects of thoracotomy on respiratory system, lung, and chest wall

ASRC Searcher: Jeanne Horrigan Serial 10/613860

March 31, 2005

-Rodrigues, Ana Claudia M.; Moreira, Lucio F. Pacheco; de Souza, Claudia L.; \_ \_ Pettersen, Paola Capparelli D.; Saldiva, Paulo Hilario N.; Zin, Walter A. Chest, v104, n6, p1882(5)

Dec, 1993

PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 4110 LINE COUNT: 00315

to the tracheal cannula for the measurement of airflow, and by electronic integration, changes in lung volume. The flow resistance of the equipment (tracheal cannula included) was constant up to flow...
...Mass). Changes in esophageal pressure (Pes) were measured with a 30-cm-long water-filled catheter (PE-240) with side holes at the tip connected to a PR23-2D-300 Statham differential pressure transducer (Hato Rey, Puerto Rico). The catheter was passed into the stomach and then slowly returned to the esophagus; its proper positioning was assessed using the "occlusion test." [28] This consisted of comparing [delta]pes and [delta]ptr during spontaneous inspiratory efforts subsequent to airway occlusion at end expiration. In all instances [delta]Pes was close to [delta]Ptr, the difference...

### 14/3,K/3 (Item 3 from file: 149)

DIALOG(R) File 149:TGG Health&Wellness DB(SM)

(c) 2005 The Gale Group. All rts. reserv.

01480179 SUPPLIER NUMBER: 15257157 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Fetal surgical therapy. (review article)

Adzick, N. Scott; Harrison, Michael R.

The Lancet, v343, n8902, p897(6)

April 9, 1994

PUBLICATION FORMAT: Magazine/Journal ISSN: 0099-5355 LANGUAGE: English RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional

WORD COUNT: 4957 LINE COUNT: 00426

... NS, Harrison MR, Flake AW, et al. Fetal surgery for cystic adenomatoid malformation of the **lung**. F Pediatr Surg 1993; 28: 806-12. [6] Longaker MT, Laberge JM, Dansereau J, et...

...AM, et al. Correction of congenital diaphragmatic hernia in utero II. Simulated correction permits fetal **lung** growth with survival at birth. Surgery 1980; 89: 260-68. [12] Harrison MR, Adzick NS...

...Pediatr Surg 1993;28:1411-18. [15] Hedrick MH, Estes JM, Sullivan KM, et al. Plug the lung until it grows (PLUG): a new method to treat congenital diaphragmatic hernia in utero. Surgical Forum 1993; 44: 644... 1993; 2: 113-20. [22] Delia JE, Cruikshank DP, Keye WR. Fetoscopic neodymium: YAG laser occlusion of placental vessels in severe twin-twin transfusion syndrome. Obstet Gynecol 1990; 75: 1046-53. [23] Porreco RP, Barton SM, Havercamp AD. Occlusion of umbilical artery in acardiac acephalic twin. Lancer 1991; 337: 326-27. [24] Fries MH...

...1990; 25: 587-93. [29] Manning FA, Harrison MR, Rodeck CH, et al. Special report: catheter shunts for fetal hydronephrosis and hydrocephalus. N Engly F Med 1986; 315: 336-40. [30] Martinez-Ferro M, Hedrick MH, Flake AW, et al. Prenatal diagnosis of congenital high airway obstruction (CHAOS): potential for perinatal intervention. F Pediatr Surg 1994; 29: 271-74. [31] Harrison...

# 14/3,K/5 (Item 5 from file: 149) DIALOG(R)File 149:TGG Health&Wellness DB(SM) (c) 2005 The Gale Group. All rts. reserv.

Serial 10/613860 March 31, 2005

01777447 SUPPLIER NUMBER: 20842742 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Respiratory mechanics after prosthetic reconstruction of the chest wall in
normal rats.

Macedo-Neto, Amarilio V.; Santos, Leonardo V.; Menezes, Sara L.S.; Paiva, Daniela S.S.; Rocco, Patricia R.M.; Zin, Walter A.

Chest, v113, n6, p1667(6)

June, 1998

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 4418 LINE COUNT: 00437

cm patch of PTFE or PPMM with 5-0 running polypropylene suture. In addition, a catheter (1.5 mm external diameter) was inserted into the pleural cavity at the level of the seventh intercostal space. For this purpose, the catheter was assembled inside a needle, the distal extremity of which was airtight. After the introduction of the needle tip into the thoracic cavity, a **catheter** segment of about 2 cm was then implanted, and the needle was removed. The catheter was secured in place and the airtightness assured by stitching the skin around the catheter . This chest catheter was connected to a water seal apparatus and periodically a suction was applied with a 20-mL syringe. To eliminate the pneumothorax, in all instances the last stitch was made while the lungs were kept inflated at total lung capacity. Right after chest wall closure, the lungs underwent radioscopic examination in an attempt to identify the presence of pneumothorax or any other undesirable alteration. Respiratory mechanics were studied before surgery and immediately after chest wall closure with the prosthesis. The experiments did not last (is greater than)

...differential pressure transducer (Hewlett-Packard 270; Waltham, Mass). Changes in esophageal pressure (Pes), which reflects chest wall pressure, were measured with a 30-cm-long water-filled catheter (PE-240) with side holes at the tip connected to a differential pressure transducer (Statham PR23-2D-300; Hato Rey, Puerto Rico). The catheter was passed into the stomach and then slowly returned into the esophagus; its proper positioning was assessed using the "occlusion test."(19) The frequency responses of the pressure measurement systems (Ptr and Pes) were flat...

# 14/3,K/7 (Item 7 from file: 149)

DIALOG(R) File 149:TGG Health&Wellness DB(SM)

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01853720 SUPPLIER NUMBER: 55653632 (USE FORMAT 7 OR 9 FOR FULL TEXT) Clinical Conference on Management Dilemmas(\*).

Schnader, Jeff; Khan, Shamim A.; Smith, Robert M.; White, Dorothy A.; Tomford, J. Walton

Chest, 116, 2, 549

August, 1999

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional WORD COUNT: 5910 LINE COUNT: 00503

... the angiogram. Thrombosis of the right jugular vein (and a) large cavity in the fight lung with an air fluid level (are evident). Severe bullous disease (is seen) in the left...

...to perform any invasive intervention in view of the fact that the tissues of the **chest wall** had been irradiated and there was a possibility of carcinoma in and around the diseased...

...the absence of extenuating circumstances such as embolism, severe edema,

Serial 10/613860 March 31, 2005

or the presence of a **catheter** , I was reluctant to suggest anticoagulation because patients with endovascular infections have a tendency to...

14/3,K/8 (Item 8 from file: 149)

DIALOG(R) File 149:TGG Health & Wellness DB(SM)

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01910489 SUPPLIER NUMBER: 62495038 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Suture or Prosthetic Reconstruction of Experimental Diaphragmatic

Suture or Prosthetic Reconstruction of Experimental Diaphragmatic Defects(\*).

Menezes, Sara L.S.; Chagas, Paula S.C.; Macedo-Neto, Amarilio V.; Santos, Viviane C.T.; Rocco, Patricia R.M.; Zin, Walter A.

Chest, 117, 5, 1443

May, 2000

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0012-3692 LANGUAGE: English RECORD TYPE: Fulltext TARGET AUDIENCE: Professional

WORD COUNT: 4360 LINE COUNT: 00375

... was connected to the tracheal cannula for the measurements of airflow (V) and changes in **lung** volume (VT). The pressure gradient across the pneumotachograph was determined by means of a Validyne...

...measured with a Validyne MP45-2 differential pressure transducer. Changes in esophageal pressure, which reflects chest wall pressure (PW), were measured with a 30-cm-long water-filled catheter (PE-240), with side holes at the tip, connected to a PR23-2D-300 Statham differential pressure transducer (Hato Rey, Puerto Rico). The catheter was passed into the stomach, and then slowly returned into the esophagus; its proper positioning was assessed using the "occlusion test."(13)

Muscle relaxation was achieved with gallamine triethiodide (2 mg/kg IV), and artificial...kept inflated to total lung capacity (Ptr, +30 cm (H.sub.2)O). Right after **chest wall** closure, the **lungs** underwent radioscopic examination in an attempt to identify the presence of pneumothorax or any other...

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```
-File 144:Pascal-1973-2005/Mar W3
         (c) 2005 INIST/CNRS
        Items
               Description
Set
           45
                COLLATERAL () VENTILATION
S1
        31540 CATHETER? ?
S2
         2578 AIRTIGHT OR (AIR OR FLUID) () TIGHT OR HERMETIC?
S3
        80888 SEAL??? OR PLUG? ? OR OCCLUS??? OR OCCLUD?
S4
        34215 AIRWAY? ? OR (THORACIC OR CHEST) () WALL? ?
S5
       175427 LUNG OR LUNGS
S6
S7
       281574
               AIR
                CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-
S8
       478981
             ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ?
               S2 NOT S8
S9
        27911
                S1 AND (S2 OR S8) AND S3:S4 AND S5 AND S6
S10
                RD (unique items) [duplicates]
S11
File 155:MEDLINE(R) 1951-2005/Mar W4
         (c) format only 2005 The Dialog Corp.
       5:Biosis Previews(R) 1969-2005/Mar W3
File
         (c) 2005 BIOSIS
File 73:EMBASE 1974-2005/Mar W4
         (c) 2005 Elsevier Science B.V.
File 34:SciSearch(R) Cited Ref Sci 1990-2005/Mar W3
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
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         5069 AIRTIGHT OR (AIR OR FLUID) () TIGHT OR HERMETIC?
       517159 SEAL??? OR PLUG? ? OR OCCLUS??? OR OCCLUD?
S4
       320535 AIRWAY? ? OR (THORACIC OR CHEST) () WALL? ?
S5
               LUNG OR LUNGS
S6
      1420809
S7
       656926
                AIR
                CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-
S8
      1702221
             ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ?
S9
       257997 S2 NOT S8
                S1 AND (S2 OR S8) AND S3:S4 AND S5 AND S6
S10
           15
S11
            7
                RD (unique items)
S12
            1
                $11/2004:2005
S13
            6
                S11 NOT S12
S14
                Sort S13/ALL/PY, A
            (Item 1 from file: 155)
DIALOG(R) File 155:MEDLINE(R)
 (c) format only 2005 The Dialog Corp. All rts. reserv.
05786666 PMID: 7380710
  Collateral resistance at alveolar level in excised dog lungs .
  Sasaki H; Takishima T; Nakamura M
  Journal of applied physiology- respiratory, environmental and exercise
                            Jun 1980, 48 (6) p982-90, ISSN 0161-7567
physiology (UNITED STATES)
Journal Code: 7801242
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
```

Serial 10/613860 March 31, 2005

Main Citation Owner: NLM

Record type: MEDLINE; Completed

In excised dog lungs , collateral resistance was measured among separate groups of alveoli. Alveoli beneath the pleural surface were multipunctured by a small needle, and alveolar pressure and flow were measured in capsules glued onto the punctured pleural surface. When the airway opening was collateral ventilation appeared to occur mainly through the closed, regular airway system, but not through the collateral channels . When the airway opening and the segmental bronchus were occluded, collateral airflow appeared to occur first, within the segment through its airway system; second, through the intersegmental collateral channels to other segments; and third, to output alveoli through the airway system. When airway was obstructed down to the bronchilar level with silicone rubber, collateral resistance became extremely high. It was concluded that collateral resistantce at the alveolar level was considerably higher than the resistance in the regular airway system.

Record Date Created: 19800825
Record Date Completed: 19800825

# 14/7/2 (Item 2 from file: 73)

DIALOG(R) File 73:EMBASE

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04107199 EMBASE No: 1989276245

Pulmonary gas exchange after multiple airway occlusion by beads in the dog

Lee L.-N.; Ueno O.; Wagner P.D.; West J.B.

Department of Medicine, School of Medicine, University of California-San Diego, La Jolla, CA 92093-0623 United States

American Review of Respiratory Disease ( AM. REV. RESPIR. DIS. ) (United States) 1989, 140/5 (1216-1221)

CODEN: ARDSB ISSN: 0003-0805

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Patients with asthma frequently show a bimodal distribution of ventilation-perfusion (V.A/Q.) ratios. One mode is centered on a V.A/Q. ratio of near normal value, whereas the other has a very low V.A/Q. ratio. There is usually almost no perfusion of unventilated units. We have suggested that this bimodal pattern is caused by complete obstruction of some airways with ventilation of their distal alveoli through collateral channels . To test this hypothesis, we occluded airways of anesthetized dogs with beads of 1.6, 2.4, and 4.8 mm in diameter, and measured V.A/Q. distributions using the multiple inert gas elimination technique. Beads were inserted via a bronchoscope until the PaOinf 2 fell by 20 mm Hg, or its value was less than 70 mm Hg. Occlusion of small airways (1.6 mm diameter) resulted in a mild increase in dispersion of V.A/Q. ratios. With 2.4 mm beads, the dispersion increased further. By contrast, all dogs given 4.8 mm beads showed a bimodal distribution of V.A/Q. ratios. All animals developed some shunt. We interpret these results as showing that when 1.6 mm airways are occluded, collateral ventilation to distal units is so efficient that ventilation is only mildly impaired; however, as occlusion becomes more proximal, collateral ventilation is less effective until with 4.8 mm beads, the ventilation of distal units is so poor that a bimodal pattern develops. The results suggest that the bimodal distributions seen in asthma are compatible with complete obstruction of some airways , and that the levels of obstruction may affect the pattern

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of V.A/Q. distribution.

14/7/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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10097109 PMID: 8442584

Collateral ventilation and gas exchange during airway occlusion in the normal human lung.

Morrell N W; Roberts C M; Biggs T; Seed W A

Department of Medicine, Charing Cross and Westminster Medical School, London, United Kingdom.

American review of respiratory disease (UNITED STATES) Mar 1993, 147 (3) p535-9, ISSN 0003-0805 Journal Code: 0370523

Publishing Model Print; Comment in Am J Respir Crit Care Med. 1994 Feb;149(2 Pt 1) 553-4; Comment in PMID 8306060

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

The effectiveness of collateral ventilation in maintaining alveolar tensions in obstructed lung segments was investigated using fiberoptic bronchoscopy to place an occluding catheter -tip balloon in selected lobar and segmental bronchi in supine normal human subjects. Gas tensions from beyond the occlusion were measured with a respiratory mass spectrometer. Collateral ventilation is known to be minimal between lobes; therefore, values measured in obstructed lobes provide a control. No significant difference was found between the partial pressures of oxygen or carbon dioxide measured in obstructed lobes and in obstructed segments. In both cases respiratory gas tensions approached reported values for mixed venous levels. The time taken to attain a steady state of gas composition in the obstructed lung was rapid (approximately 50 s), and it was no different for lobes and segments. In addition, collateral ventilation was assessed by measuring the amount of helium reaching occluded lobes and segments when subjects breathed a mixture of 21% oxygen and 79% helium. The rate of rise in helium concentration was less than 1%/min in both lobes and segments, a figure that may be explained by delivery of helium in recirculated blood rather than by collateral ventilation . We conclude that intersegmental collateral ventilation has a negligible role in the maintenance of alveolar gas tensions in supine normal humans during tidal breathing.

Record Date Created: 19930401 Record Date Completed: 19930401

# 14/7/4 (Item 4 from file: 34)

DIALOG(R) File 34:SciSearch(R) Cited Ref Sci

(c) 2005 Inst for Sci Info. All rts. reserv.

03143002 Genuine Article#: NH836 Number of References: 21

Title: BRONCHOMOTOR AGENTS AND HYSTERESIS OF COLLATERAL RESISTANCE IN DOG LOBE

Author(s): KIKUCHI R; KIKUCHI K; HILDEBRANDT J; SEKIZAWA K; YAMAYA M; SASAKI H

Corporate Source: TOHOKU UNIV, SCH MED, DEPT GERIATR MED/SENDAI 980//JAPAN/;
TOHOKU UNIV, SCH MED, DEPT GERIATR MED/SENDAI 980//JAPAN/

Journal: RESPIRATION PHYSIOLOGY, 1994, V96, N2-3 (MAY), P127-137

ISSN: 0034-5687

Serial 10/613860 March 31, 2005

Language: ENGLISH Document Type: ARTICLE

Abstract: The effect of smooth muscle tone on hysteresis of collateral channels was examined and compared with that of airways, in freshly excised dog lobes. A double lumen catheter was sealed into a branch off the main bronchus, and air (Vs) flowed through the outer lumen while the pressure in the segment (Ps) was measured by the inner lumen. Collateral conductance (Gcoll) was calculated as Gcoll = Vs/Ps. In another series of experiments a pleural capsule was used to measure either segmental airway flow (Vsaw) or capsule pressure (Pcap). Segmental airway conductance (Gsaw) was calculated as Gsaw = Vsaw/(Ps-Pcap). Hysteresis for Gcoll vs lung volume (VL) curves were almost absent in control and after isoproterenol inflation Gcoll was greater than deflation Gcoll at a given VL (clockwise history). Conversely, after histamine Gcoll vs VL curves showed a counterclockwise history. The behaviors of Gcoll and Gsaw against a bronchomotor agent were similar. We conclude that major collateral channels have muscular walls, and being that of an airway type.

# 14/7/6 (Item 6 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

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14673737 PMID: 12607646

Bronchial fenestration improves expiratory flow in emphysematous human lungs .

Lausberg Henning F; Chino Kimiaki; Patterson G Alexander; Meyers Bryan F; Toeniskoetter Patricia D; Cooper Joel D

Division of Cardiothoracic Surgery, Department of Surgery, Washington University School of Medicine and Barnes-Jewish Hospital, St. Louis, Missouri, USA.

Annals of thoracic surgery (United States) Feb 2003, 75 (2) p393-7; discussion 398, ISSN 0003-4975 Journal Code: 15030100R

Contract/Grant No.: R01 HL62194; HL; NHLBI

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

BACKGROUND: The crippling effects of emphysema are due in part to dynamic hyperinflation, resulting in altered respiratory mechanics, an increased work of breathing, and a pervasive sense of dyspnea. Because of the ventilation present in emphysematous lungs, we extensive collateral hypothesize that placement of stents between pulmonary parenchyma and large could effectively improve expiratory flow, thus reducing dynamic hyperinflation. METHODS: Twelve human emphysematous lungs, removed at the lung transplantation, were placed in an airtight ventilation chamber with the bronchus attached to a tube traversing the chamber wall, and attached to a pneumotachometer. The chamber was evacuated to -10 cm H2O pressure for lung inflation. A forced expiratory maneuver was simulated by rapidly pressurizing the chamber to 20 cm H2O, while the expiratory volume was continuously recorded. A flexible bronchoscope was then inserted into the airway and a radiofrequency catheter (Broncus Technologies) was used to create a passage through the wall of three separate segmental bronchi into the adjacent lung parenchyma. An expandable stent, 1.5 cm in length and 3 mm in diameter, was then inserted through each passage. Expiratory volumes were then remeasured as above. In six experiments, two

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additional stents were then inserted and forced expiratory volumes again determined. RESULTS: The forced expiratory volume in 1 second (FEV1) increased from 245 +/- 107 mL at baseline to 447 +/- 199 mL after placement of three bronchopulmonary stents (p < 0.001). With two additional stents, the FEV1 increased to 666 +/- 284 mL (p < 0.001). CONCLUSIONS: Creation of extra-anatomic bronchopulmonary passages is a potential therapeutic option for emphysematous patients with marked hyperinflation and severe homogeneous pulmonary destruction.

Record Date Created: 20030227
Record Date Completed: 20030317

Serial 10/613860 March 31, 2005

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File_149:TGG Health&Wellness DB(SM) 1976-2005/Mar W3_ _ _ _
         (c) 2005 The Gale Group
                Description
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Set
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S1
        10144
                CATHETER? ?
S2
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          788
S3
                SEAL??? OR PLUG? ? OR OCCLUS??? OR OCCLUD?
        17388
S4
S5
        12996
                AIRWAY? ? OR (THORACIC OR CHEST) () WALL? ?
        41568
                LUNG OR LUNGS
S6
                AIR
S7
        34183
                CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-
S8
             ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ?
                S2 NOT S8
         5839
S9
                S S1 AND (S2 OR S8) (S)S3:S4(S)S5(S)S6
S10
                S1 AND (S2 OR S8) (S) S3:S4(S) S5(S) S6
S11
 11/3, K/1
DIALOG(R) File 149:TGG Health & Wellness DB(SM)
(c) 2005 The Gale Group. All rts. reserv.
             SUPPLIER NUMBER: 16280679
                                          (USE FORMAT 7 OR 9 FOR FULL TEXT)
The bronchial response, but not the pulmonary response to inhaled
  methacholine is dependent on the aerosol deposition pattern.
Schmekel, Birgitta; Hedenstrom, Hans; Kampe, Mary; Lagerstrand, Lars;
Stalenheim, Gunnemar; Wollmer, Per; Hedenstierna, Goran
Chest, v106, n6, p1781(7)
Dec, 1994
                                       ISSN: 0012-3692 LANGUAGE: English
PUBLICATION FORMAT: Magazine/Journal
RECORD TYPE: Fulltext TARGET AUDIENCE: Professional
                      LINE COUNT: 00408
WORD COUNT:
              4704
        there was no difference in the response whether the deposition was
in central or peripheral airways . This may appear surprising, since it is
generally held that gas exchange impairment is caused mainly by peripheral
airway dysfunction. However, canine experiments on airway
                                                               occlusion by
means of balloon catheters and beads implanted in the bronchial
tree(22)(23) have shown that the VA/Q mismatch becomes more severe with a
larger obstructed airway . This may indicate that hypoxic pulmonary
```

...occurred independently of whether the aerosol was deposited in the central or in the distal **airways**. Taking these data together, different mechanisms of the methacholine-induced bronchoconstriction and responses of the...

ventilation may also be more

vasoconstriction is more effective the smaller the region of lung

effective at a segmental level than when a whole lobe is...

involved. (24) Similarly, collateral

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005 File 350:Derwent WPIX 1963-2005/UD,UM &UP=200519 File 347: JAPIO Nov 1976-2004/Nov (Updated 050309) Description Items Set CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-S1 2380111 ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ? 103858 AIRTIGHT OR AIR() TIGHT OR HERMETIC? OR IMPERMEAB?(1N) AIR S2 843535 SEAL??? OR OCCLUS??? OR OCCLUD? S3 4292 AIRWAY? ? S4 350 (THORACIC OR CHEST) () WALL S5 S6 24187 LUNG OR LUNGS 5 S1 AND S2()S3 AND S4:S5 AND S6 S7 S8 7128 FLUID()TIGHT NOT S2 S9 7328 FLUID()TIGHT 2138 S9()S3 NOT S2()S3 S10 3 S1 AND S10 AND S4:S5 AND S6 S11 S12 3 S11 NOT S7 7/34/2 DIALOG(R) File 350: Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv. 015408654 \*\*Image available\*\* WPI Acc No: 2003-470794/200345 Device isolating one side of patient's airway for single-lung ventilation during surgery, includes mask, tubing and inflatable collar seal for bronchial stem Patent Assignee: GENTZEL I (GENT-I); KLEIN U (KLEI-I) Inventor: GENTZEL I; KLEIN U Number of Countries: 104 Number of Patents: 003 Patent Family: Patent No Date Applicat No Kind Date Week Kind DE 10232728 C1 20030618 DE 10232728 20020716 200345 B Α WO 200406746 A2 20040122 WO 2003EP6411 A 20030618 200413 AU 2003246549 A1 20040202 AU 2003246549 Α 20030618 200450 Priority Applications (No Type Date): DE 10232728 A 20020716 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes 7 A61M-016/04 DE 10232728 C1 A61B-000/00 WO 200406746 A2 G Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW AU 2003246549 A1 Based on patent WO 200406746 A61M-016/04 Abstract (Basic): DE 10232728 C1 NOVELTY - The larynx mask (1) is introduced via the mouth, ahead of the upper throat. An outwardly-projecting, integral tube (3) passes through the pharynx. A second tube (6) is included. This can be introduced through the first tube (3), into the airway. At one end, an

inlet (14) is accessible from the exterior when introduced. The outlet

DETAILED DESCRIPTION - The larynx mask (1) is introduced via the

(10) at the other end is located in a bronchial stem (8).

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mouth, ahead of the upper throat. An outwardly-projecting, integral tube (3) passes through the pharynx. A second tube (6) is included. This can be introduced through the first tube (3), into the airway. At one end, an inlet (14) is accessible from the exterior when introduced. The outlet (10) at the other end is located in a bronchial stem (8). Close to the outlet opening an inflatable collar (9) hermetically-seals the annular space between the second tube and the inner wall of the bronchial stem. The first tube (3) is an airway for lung ventilation. The second (6) is a selective bronchial block, and at the same time forms a catheter tube for introduction of instruments. These remove blood and secretions from the airways, provide fiber-optic observation and/or ventilate the sealed-off lung.

USE - A device isolating one side of patient's airway for single-lung ventilation during surgery.

ADVANTAGE - The device retains all the advantages of the larynx mask, whilst avoiding disadvantages of the double-lumen tube and the former bronchial blocking system. The second tube can be used to maintain a continuous breathing pressure in the side of the lung closed off from the ventilation side. Different ventilation technologies can be applied. The ventilation side may be changed over temporarily.

DESCRIPTION OF DRAWING(S) - A frontal, partially-transparent view of the breathing passages and the new device is presented.

larynx mask (1)
integral tube (3)
introduction section (4)
second tube (6)
bronchial stem (8)
inflatable collar (9)
outlet (10)
inlet (14)
pp; 7 DwgNo 1/3

Technology Focus:

TECHNOLOGY FOCUS - POLYMERS - Preferred Material: The second tube (6) is PVC, polyethylene or similar. The introduction section (4) of the first tube is in the same material as the first tube (3).

Derwent Class: A96; P31; P34

International Patent Class (Main): A61B-000/00; A61M-016/04

### 7/34/3

DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.
014012334 \*\*Image available\*\*
WPI Acc No: 2001-496548/200154

Absorbable, crystalline, monocentric, polyaxial copolymer useful for manufacturing sutures, stents devices comprises non-crystallizable, flexible components of chain at core and rigid crystalline segments at chain terminals Patent Assignee: POLY-MED INC (POLY-N)

Inventor: AAKERFELDT D; EGNELOEV P; PREINIZ F; SHALABY S W; AKERFELDT D Number of Countries: 095 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Week WO 200140348 A2 20010607 WO 2000SE2160 Α 20001103 200154 B 20010612 AU 200119062 A AU 200119062 A 20001103 200154 EP 1244725 A2 20021002 EP 2000981983 A 20001103 200265 WO 2000SE2160 A 20001103

Serial 10/613860 March 31, 2005

19991130 200269 US 99167998 P US 6462169 B1 20021008

20001027 US 2000698527 Α

20001103 20030507 WO 2000SE2160 Α 200331 JP 2003515640 W

> 20001103 JP 2001541099 Α

Priority Applications (No Type Date): US 2000698527 A 20001027; US 99167998 P 19991130

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200140348 A2 E 27 C08G-063/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

Based on patent WO 200140348

AU 200119062 A

Based on patent WO 200140348

C08G-063/64 EP 1244725 A2 E Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

Provisional application US 99167998 C08G-063/08 US 6462169 B1 Based on patent WO 200140348 JP 2003515640 W 35 C08G-063/64 Abstract (Basic): WO 200140348 A2

NOVELTY - An absorbable, crystalline, monocentric, polyaxial copolymer comprises an amorphous, flexible component (I) adjacent to and originating from a central atom and a rigid, crystallizable component (II) originating outwardly from (I).

DETAILED DESCRIPTION - An absorbable, crystalline, monocentric, polyaxial copolymer (A) comprises a central atom selected from carbon or nitrogen and at least three axes originating and extending outwardly from the central atom. Each axis comprises an amorphous, flexible component (I) adjacent to and originating from the central atom; and a rigid, crystallizable component (II) originating outwardly from (I).

(I) comprises repeat units derived from at least one cyclic monomer selected from carbonates or lactones and (II) comprises repeat units derived from at least one lactone.

INDEPENDENT CLAIMS are also included for the following:

- (1) preparation of (A) involves reacting the cyclic monomer(s) with a monomeric initiator in the presence of a catalyst such that an amorphous, polymeric, polyaxial initiator is formed by ring-opening polymerization of the cyclic monomer; and then reacting the initiator with at least one lactone. The monomeric initiator is an organic compound selected from tri- or tetra-functional organic compound. The catalyst comprises a multivalent metal, and the lactone is selected from glycolide, lactide and/or dioxanone; and
- (2) a suture, a stent and a molded device for sealing punctured blood vessels comprising (A).

USE - In medical devices sutures; stents; and sealing devices for closing a wound in the wall of blood vessels (claimed).

The stents can also be useful as an intraluminal device for sutureless gastrointestinal sutureless anastomosis; in laparoscopic replacement of urinary tract segments; as an intraluminal device for artery welding; in the treatment of urethral lesions; as a tracheal. airway; in the treatment of recurrent urethral strictures; for vasectomy reversal; in the treatment of tracheal stenoses in children; for in vasovasostomy; in end-to-end ureterostomy; and as biliary devices. ASRC Searcher: Jeanne Horrigan Serial 10/613860

March 31, 2005

In bone sealants; barrier systems, particularly membranes to prevent post-surgical adhesion and compliant covers, sealants and barriers for burns, ulcers and compromised/damaged tissue; vascular devices and components for them; films to patch mechanically compromised blood vessels; coating for intravascular devices such as catheters and stents; catheters for use as transient conduits and microcellular foams with continuous porous structure for use in tissue engineering and guiding the growth of blood vessels and nerve ends; injection molded articles for use as barriers, or plugs, to aid the function of certain biomedical devices used in soft and hard tissues and which can be employed in repairing, augmenting, substituting or redirecting/assisting the functions of several types of tissues including bone, cartilage, and lung as well as vascular tissues and components of the gastrointestinal and urinogenital systems; compliant, melt-blown fabrics.

The copolymers are further useful for manufacturing a highly compliant, expandable tubular mantle, sleeve or cover which can be placed tightly outside an expandable metallic or polymeric stent so that under concentric irreversible expansion at the desired site of a treated biological conduit, such as blood vessel or a urethra, both components will simultaneously expand and the mantle provides a barrier between the inner wall of the conduit and the outer wall of the stent; for manufacturing a stretchable matrix of a fiber-reinforced cover, sleeve, or mantle for a stent, in which the fiber reinforcement is in the form of spirally coiled yarn (with and without crimping) woven, knitted, or braided construct; for manufacturing the stent mantle, or cover, which is designed to serve a controlled release matrix of bioactive agents such as those used for inhibiting neointima formation as exemplified by hirudin and the prostacyclic analogue, iloprost; for inhibiting platelet aggregation and thrombosis; for reducing intraluminal and particularly intravascular inflammation; and for suppressing restinosis; and for manufacturing molded devices or components of devices used as a hemostatic puncture closure device after coronary angioplasty.

ADVANTAGE - The polyaxial copolymer exhibits a combination of controlled branching i.e. polyaxial chain geometry and chain segmentation and block formation of the individual branches to produce absorbable polymers with tailored properties such as modulated absorption and strength loss profiles. The absorbable polymers produced have a unique combination of crystallinity and high compliance that can be melt-processed into high strength fibers and films with relatively brief absorption profiles as compared to their homopolymeric analogs.

DESCRIPTION OF DRAWING(S) - The drawings show a sealing device for closing a wound in a wall of a vessel.

First sealing member (2) Second sealing member (6) Elongated core (18) pp; 27 DwgNo 4/13

Technology Focus:

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: (I) comprises the repeat units derived from epsilon-caprolactone, trimethylene carbonate. (I) further comprises repeat units derived from glycolide. (II) comprises the repeat units derived from glycolide. (II) further comprises repeat units derived from a second monomer selected from trimethylene carbonate, epsilon-caprolactone, 1-lactide, dioxanone and

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1,5-dioxipane-2-one.

Preferred Process: The step of reacting the initiator with the lactone further comprises reaction with the second monomer selected from trimethylene carbonate, epsilon-caprolactone or 1,5-dioxipane-2-one. Preferred Device: The device comprises a first sealing member (2) attached to a distal end of an elongate member (4) provided with a distal lock portion (16), and a second sealing member (6). (6) comprises an opening (14) such that (6) is threadable onto and along (4). (2) is arranged inside and (6) is arranged outside the vessel so that (6) is lockable along (16) in order to seal the punctured blood vessel. (4) further comprises a proximal portion with a thickness smaller than (14). (4) is a suture wire and (16) has a constant thickness all over the portion, which is greater than that of (14), so that when (6) is thread onto and along (4), it is infinitely variable lockable along (16). (A) comprises a compliant cover for the stent. Extension Abstract:

EXAMPLE - Glycolide (3.1 g), trimethylene carbonate (TMC) (23.0 g), epsilon-caprolactone (20.5 g), triethanolamine (0.6775 g) and stannous octoate catalyst (0.2M in toluene, 519 microl) were added under dry nitrogen conditions to a reaction kettle. The reactants were melted at 85degreesC and evacuated with vacuum. The system was then purged with dry nitrogen and the melt was heated to 160degreesC with stirring. Samples of the prepolymer melt were taken periodically and analyzed for monomer content using gel permeation chromatography (GPC). Once the monomer content of the melt was found to be negligible, glycolide (103.4 g) was added with rapid stirring. The melt was heated to 180degreesC. Stirring was stopped upon solidification of the polymer. The polymer was heated for 2 hours at 180degreesC after solidification. The resulting polymer was cooled to room temperature, quenched in liquid nitrogen, isolated, and dried under vacuum. The polymer was quenched with liquid nitrogen and mechanically ground. The ground polymer was dried under vacuum at 25degreesC for 2 hours, at 40degreesC for two hours, and at 80degreesC for four hours. The polymer was then melt extruded at 235-245degreesC and the resulting monofilament was quenched in an ice-water bath before winding. The monofilament was dried at 40degreesC and under vacuum for four hours before orientation. The polymer was then oriented by two-stage drawing into monofilament sutures. Prior to drawing, the monofilaments were pre-tensioned and annealed. The drawing was conducted at 90-100degreesC in the first stage and 100-130degreesC in the second stage. The monofilaments were relaxed at 70degreesC for 15 minutes to reduce their free shrinkage. The oriented monofilament showed following properties: free shrinkage (%)=3.1; diameter (mil)=10.2; straight strength (Kpsi)=71; modulus (Kpsi)=195; and elongation (%)=26. The monofilament sutures were radiochemically sterilized in hermetically sealed foil packages, pre-purged with dry nitrogen gas, using 5 and 7.5 KGy of gamma radiation. The radiochemical sterilization process was carried out using 200-400 mg of Delrin (poly-formaldehyde) film as package inserts for the radiolytically controlled release of formaldehyde gas. The sterile monofilament sutures were incubated in a phosphate buffer at 37degreesC and a pH of 7.4 to determine their breaking strength retention profile as absorbable sutures. After 5/7.5 KGy of the sterilization dose, the post-irradiation properties of the sutures were: tensile strength (Kpsi)=67/65; modulus (Kpsi)=269/263; elongation (Kpsi)=31/30, and the breaking strength retention (%) was: 82/72 (after

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US 6631720 B1

AU 767665 B

1\_week); and 18/17 (after 2 weeks). Thus\_the sutures retained measurable strength after two weeks in the buffer solution. Derwent Class: A23; A26; A96; B07; D22; P31; P34 International Patent Class (Main): C08G-063/00; C08G-063/08; C08G-063/64 International Patent Class (Additional): A61B-017/04; A61B-017/12; A61K-031/78; A61L-017/12; A61L-031/06; A61M-029/02; A61P-003/06 7/34/4 DIALOG(R)File 350:Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv. 013782038 \*\*Image available\*\* WPI Acc No: 2001-266249/200127 Laryngeal-mask airway device for ventilating lungs of unconscious patient, has expandable mask with inflatable/deflatable masking ring that sealingly surrounds laryngeal inlet of patient when expanded Patent Assignee: BRAIN A I J (BRAI-I) Inventor: BRAIN A I J Number of Countries: 089 Number of Patents: 010 Patent Family: Week Kind Date Applicat No Kind Date Patent No A2 20010412 WO 2000GB3874 A 20001009 200127 WO 200124860 AU 200076743 A 20010510 AU 200076743 20001009 200143 Α EP 1220701 A2 20020710 EP 2000966299 A 20001009 200253 WO 2000GB3874 A 20001009 CN 1378470 A 20021106 CN 2000813913 A 20001009 200316 JP 2003511108 W 20030325 WO 2000GB3874 A 20001009 200330 A 20001009 JP 2001527859 A 20020320 200362 A 20001009 200365 20030827 ZA 20022286 ZA 200202286 Α A 20030829 NZ 517995 NZ 517995 WO 2000GB3874 A 20001009 B1 20031014 US 99413970 A 19991007 200368 US 6631720 B 20031120 AU 200076743 A 20001009 200381 AU 767665 US 20040089307 A1 20040513 US 99413970 A 19991007 200432 US 2003684048 A 20031010 Priority Applications (No Type Date): US 99413970 A 19991007; US 2003684048 A 20031010 Patent Details: Filing Notes Patent No Kind Lan Pg Main IPC WO 200124860 A2 E 38 A61M-016/04 Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW A61M-016/04 Based on patent WO 200124860 AU 200076743 A A61M-016/04 Based on patent WO 200124860 EP 1220701 A2 E Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI CN 1378470 A A61M-016/04 JP 2003511108 W 44 A61M-016/04 ZA 200202286 A 47 A61M-000/00 Based on patent WO 200124860 NZ 517995 A A61M-016/04 Based on patent WO 200124860

A61M-016/00

A61M-016/04 Previous Publ. patent AU 200076743

Serial 10/613860 March 31, 2005

US 20040089307 A1 A61M-016/00 Cont of application US 99413970

Cont of patent US 6631720

Abstract (Basic): WO 200124860 A2

NOVELTY - The generally elliptical inflatable/deflatable masking ring of an expandable mask sealingly surrounds the laryngeal inlet of the patient when expanded to obstruct communication between the laryngeal inlet and esophagus.

DETAILED DESCRIPTION - Airway tubes (125,127) are connected to the mask to provide a fluid flow-path from the exterior of the patient to a portion (57) of the mask arranged to communicate with the laryngeal inlet when the masking ring sealingly surrounds the laryngeal inlet. A gastro-tube is connected to the mask to provide a fluid flow-path to a portion of the mask facing the esophagus when the masking ring sealingly surrounds the laryngeal inlet. The gastro-tube and the airway tubes are hermetically sealed in side-by-side abutting adjacency to one another and to the mask so as to define an inner space between the transversely spaced walls of the masking ring and gastro-tube and airway tubes and to obstruct fluid flow between the esophagus and trachea.

USE - For ventilating lungs of unconscious patient.

ADVANTAGE - Airway and gastro-tube features are properly arranged so as to reduce the bulk and stiffness of laryngeal-mask array (LMA) structure thereby to increase tolerance by the patient of LMA, and facilitate insertion of the LMA into patient, and to simplify the LMA structure.

DESCRIPTION OF DRAWING(S) - The figure is a plan view of the anterior side of the laryngeal-mask airway device.

Mask portion (57)

Airway tubes (125,127)

pp; 38 DwgNo 2/13

Derwent Class: P34

International Patent Class (Main): A61M-000/00; A61M-016/00; A61M-016/04 International Patent Class (Additional): A61M-025/00; A61M-025/04

### 7/34/5

DIALOG(R) File 350: Derwent WPIX

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013292787 \*\*Image available\*\*
WPI Acc No: 2000-464722/200040

Airway manifold for simultaneous fibre-optic bronchoscopy and airway instrumentation of patient's lungs, has compressible diaphragm seal fitted at outer periphery of secondary instrument port

Patent Assignee: WISCONSIN MEDICAL INC (WISC-N)

Inventor: ARNDT G A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 6086529 A 20000711 US 9746323 A 19970513 200040 B
US 9834958 A 19980304

Priority Applications (No Type Date): US 9746323 P 19970513; US 9834958 A 19980304

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6086529 A 7 A61B-001/267 Provisional application US 9746323

Abstract (Basic): US 6086529 A

NOVELTY - A perforated, compressible diaphragm seal is fitted at

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- the outer periphery of a threaded secondary instrument port (5) on a hollow manifold body. The secondary instrument port inclines from a fibre-optic bronchoscope insertion port (4) on the manifold body at an angle between 15 and 70 degrees, and facilitates insertion of a secondary instrument e.g. a tubular catheter (2).

DETAILED DESCRIPTION - The bronchoscope insertion port is coaxial to a endotracheal tube connection port and is perpendicular to a mechanical ventilator port. All ports open into the passageway within the manifold body. An INDEPENDENT CLAIM is also included for a catheter device introduction method used for the patient's ventilated lungs.

USE - For performing simultaneous fibre=optic bronchoscopy and airway instrumentation of surgical or medical patient's lungs, while ensuring continuous mechanical ventilation to patient's lungs.

ADVANTAGE - Enables fibre-optic bronchoscopy to performed simultaneous with airway instrumentation of patient's lungs, while keeping lungs ventilated. Diaphragm seal ensures airtight sealing of secondary instrument, as well fixing and keeping instrument in place in relation to patient's lungs or airway. Allows secondary instrument e.g. catheter, to remain in patient's lungs for few hours even after fibre-optic bronchoscope is pulled out, Enables simple introduction of catheter into lung at designated angle. Allows simple inspection of catheter position when placed beside fibre-optic bronchoscope. Diaphragm seal compensates to change in patient's pulmonary physiology, when higher ventilation pressure is applied to patient's lungs.

DESCRIPTION OF DRAWING(S) - The figure shows the isometric view of the use state of an airway manifold.

Catheter (2)

Fibre=optic bronchoscope insertion port (4)

Secondary instrument port (5)

pp; 7 DwgNo 1/3

Derwent Class: P31; P35

International Patent Class (Main): A61B-001/267
International Patent Class (Additional): A62B-009/04

12/34/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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016787413 \*\*Image available\*\*
WPI Acc No: 2005-111689/200512

Device for delivering aerosol mist to lung in medicating ventilated patient comprises endotracheal tube with sub-port having sufficient diameter to permit the passage of sub-port tube

Patent Assignee: WRIGHT C A (WRIG-I)

Inventor: WRIGHT C A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20050016542 A1 20050127 US 2003431811 A 20030505 200512 B
US 2004884080 A 20040703

Priority Applications (No Type Date): US 2003431811 A 20030505; US 2004884080 A 20040703

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20050016542 A1 6 A61M-016/00 Div ex application US 2003431811 Div ex patent US 6766801

Serial 10/613860 March 31, 2005

Abstract (Basic): US 20050016542 A1

NOVELTY - A medication delivery device (12) comprises a canister having a medication and a propellant; and an endotracheal **tube** (16) to connect the canister to a nozzle connector to facilitate coupling of the canister to a supported nozzle connector seat and a fluid atomizer in the **airway** passage of the patient. The endotracheal **tube** has a sub-port **tube** (26).

USE - For delivering aerosol mist to the **lung** in medicating ventilated patient (claimed).

ADVANTAGE - The device optimizes particle size for distal airway penetration and reduces local mucosal impact and irritation. The device avoids the drug waste running down the interior wall of the endotracheal tube, thus allows the clinician to know exactly how much drug is delivered to the patient. The device facilitates atomizing drugs directly into the lungs of the patient without interruption of the ventilating process. The device provides unique delivery of the aerosol spray mist beyond the tip of the endotracheal tube resulting in more rapid and higher peak lung levels than nebulized or endotracheally injected medication. A fluid tight seal is formed when the atomizer connector is received within the seat and this allows fluid under pressure to be delivered from the canister to the atomizer nozzle without loss of pressure, thus fully pressurized dose of the drug can be delivered into the distal airways of the patient.

DESCRIPTION OF DRAWING(S) - The figure shows a perspective view of the intra-tracheal aerosol delivery system.

Intra-tracheal aerosol delivery system (10)

Patient care device (12) Endotracheal **tube** (16)

Sub-port opening (22)

Sub-port tube . (26)

pp; 6 DwgNo 1/4

Derwent Class: B07; P34

International Patent Class (Main): A61M-016/00

12/34/3 (Item 3 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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016000773 \*\*Image available\*\*
WPI Acc No: 2004-158623/200416

Long-term oxygen therapy system for treating hypoxemic patients having chronic obstructive pulmonary disease, includes oxygen supply, valve, conduit, and sealing device that provides fluid tight seal between conduit and thoracic wall

Patent Assignee: CORDIS CORP (CRDC ); TANAKA D (TANA-I)

Inventor: TANAKA D

Number of Countries: 035 Number of Patents: 005

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
EP 1386635 Al 20040204 EP 2003254748 A 20030729 200416 B
CA 2436483 Al 20040131 CA 2436483 A 20030731 200416
US 20040024356 Al 20040205 US 2002399907 P 20020731 200416
US 2003613358 A 20030703

JP 2004130103 A 20040430 JP 2003282940 A 20030730 200430

ASRC Searcher: Jeanne Horrigan Serial 10/613860

March 31, 2005

-AU 2003227328 A1 20040219 AU 2003227328 A 20030729 200445

Priority Applications (No Type Date): US 2003613358 A 20030703; US 2002399907 P 20020731

Patent Details:

Filing Notes Patent No Kind Lan Pg Main IPC

EP 1386635 A1 E 13 A61M-037/00

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

A61M-016/00 A1 E CA 2436483

US 20040024356 A1 A61M-029/00 Provisional application US 2002399907

16 A61M-016/04 JP 2004130103 A AU 2003227328 A1 A61M-016/00

Abstract (Basic): EP 1386635 A1

NOVELTY - A long-term oxygen therapy system (100) has an oxygen supply (102); valve (106); conduit (s) (104) having a first end connected to the oxygen supply and a second end passing through the wall and lung (108) of a patient to establish fluid communication between the oxygen supply and the inner volume of the lung; and a sealing device connected to the conduit (s) and providing tight seal between the conduit (s) and the thoracic wall .

USE - For the treatment of hypoxemic patients having chronic obstructive pulmonary disease (claimed), e.g. emphysema or chronic

ADVANTAGE - The inventive long-term oxygen therapy system improves oxygen transfer efficiency in the lungs to reduce oxygen supply requirements, which in turn reduces the patient's medical costs. It also allows for improved self-image, improved mobility, greater exercise capability and is easily maintained.

DESCRIPTION OF DRAWING(S) - The figure is a diagrammatic view of a long term oxygen therapy system of the invention.

Long term oxygen therapy system (100)

Oxygen supply (102)

Conduit (104)

Valve (106)

Lung (108)

pp; 13 DwgNo 1/6

Derwent Class: B06; B07; P33; P34; S05

International Patent Class (Main): A61M-016/00; A61M-016/04; A61M-029/00;

A61M-037/00

International Patent Class (Additional): A61H-031/00; A61M-025/00;

A61M-025/02; A61M-031/00

ASRC Searcher: Jeanne Horrigan Serial 10/613860 March 31, 2005 -File 350:Derwent WPIX 1963=2005/UD,UM &UP=200519 (c) 2005 Thomson Derwent File 347: JAPIO Nov 1976-2004/Nov (Updated 050309) (c) 2005 JPO & JAPIO Description Set Items CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-S1 2380111 ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ? 103858 AIRTIGHT OR AIR() TIGHT OR HERMETIC? OR IMPERMEAB?(1N) AIR **S2** 843535 SEAL??? OR OCCLUS??? OR OCCLUD? S3 S4 4292 AIRWAY? ? 350 (THORACIC OR CHEST) () WALL S5 24187 LUNG OR LUNGS **S6** 7328 FLUID () TIGHT S7 178467 PLUG? ? S8 1332174 AIR 59 7 S1(S)(S3 OR S8)(S)S9(S)S4:S5(S)S6 S10 (Item 3 from file: 350) 10/26,TI/3 DIALOG(R) File 350: Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv. 014910538 WPI Acc No: 2002-731244/200279 Tissue motion detection device for treatment of chronic obstructive pulmonary disease, has transducer assembly with lens located at distal end of assembly, and heating element located away from the lens 10/26,TI/6 (Item 6 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv. 011087939 WPI Acc No: 1997-065863/199707 Breath activated medicament inhaler - comprising an air conduit with an arrangement for introducing a dose of the medicament thereto 10/34/2 (Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2005 Thomson Derwent. All rts. reserv. 016598216 \*\*Image available\*\* WPI Acc No: 2004-756950/200474 Treating a lung, e.g. improving gaseous exchange in a lung of individual having chronic obstructive pulmonary disease, by connecting extrapleural airway with the lung such that air may directly pass from lung to extrapleural airway Patent Assignee: BRONCUS TECHNOLOGIES INC (BRON-N) Inventor: KAPLAN G; LOOMAS B Number of Countries: 001 Number of Patents: 001 Patent Family: Patent-No-Kind Date Applicat No Kind Date Week US 20040211434 A1 20041028 US 2002393964 20020705 200474 B P

Priority Applications (No Type Date): US 2002393964 P 20020705; US 2003615491 A 20030707
Patent Details:

US 2003615491

20030707

Α

Patent No Kind Lan Pg Main IPC Filing Notes

Serial 10/613860 March 31, 2005

US 20040211434 A1 26 A61B-019/00 Provisional application US 2002393964

Abstract (Basic): US 20040211434 A1

NOVELTY - Treating a lung, e.g. improving gaseous exchange in a lung of individual having chronic obstructive pulmonary disease (COPD), includes connecting an extrapleural airway such as trachea (54) with the lung (58) so that air may directly pass from the lung to the extrapleural airway.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a conduit for connecting an extrapleural airway with the lung, comprising a body having ends and a passageway, and an invertible end portion extending from each end. The end portions are designed in such way that when the conduit is in a first state, the end portions extend away from one another and when the conduit is in a second state, the end portions extend towards one another.

USE - For treating a lung, e.g. improving gaseous exchange in a lung of individual having COPD.

ADVANTAGE - The inventive method effectively improves gaseous exchange in a lung of individual having COPD.

DESCRIPTION OF DRAWING(S) - The figure is a schematic illustration of a conduit connecting the left lung to the trachea.

Conduit (52)

Trachea (54)

Left lung (58)

Visceral pleura (60)

Parietal pleura (62)

Pleural space (64)

pp; 26 DwgNo 2A/11

Technology Focus:

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Materials: The sealant may comprise talc.

INSTRUMENTATION AND TESTING - Preferred Method: The method includes creating respective channel through the wall of lung and the wall of extrapleural airway using radio frequency (RF) energy-delivering device. The channel through the extrapleural airway wall may be created prior to creating the channel through the lung wall. The method may include fixing the extrapleural airway wall to the lung wall, and creating channels through the extrapleural airway wall and lung wall is performed subsequent to the fixing step. Blood vessels are detected prior to creating channels in the extrapleural airway wall and lung wall. The lung and extrapleural airway are connected with a conduit having an air passageway. A sealant is provided to an exterior surface of the conduit to prevent side flow of air around the conduit . Intrapleural conduit (s) is deployed to maintain a channel surgically created in an intrapleural airway . The extrapleural airway may be connected with a tissue structure within the lung . Preferred Components: The tissue structure is parenchymal tissue, airway, or alveoli. The lung wall is the visceral pleura (60). Preferred Device: The conduit (52) comprises first and second portions for securing the conduit to the lung and extrapleural airway, and a center section between the first and second portions. Each of the first and second portions comprises deflectable extension members. When the conduit is deployed, the extension members from the first portion oppose the extension members from the second portion, sandwiching a tissue between them. The

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- extension members form right\_angle (preferably 90-135degrees angle) when deployed. The **conduit** is provided with a biocompatible coating that promotes wound healing, and visualization feature(s) on its exterior surface. The first and second end portions may be curved or bowl-shaped. Preferred Dimensions: The center section has a length of 0.5-50 (preferably 1) mm.

ORGANIC CHEMISTRY - Preferred Materials: The sealant may comprise talc.

POLYMERS - Preferred Materials: The sealant is fibrin glue or cyano acrylate. The conduit is made of elastomeric material

Derwent Class: A96; P31

International Patent Class (Main): A61B-019/00

International Patent Class (Additional): A61B-018/18

# 10/34/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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013698801 \*\*Image available\*\*

WPI Acc No: 2001-183025/200118

Gaseous flow altering device has probe to create collateral channel in lung and puncture airway wall in lung, with gas delivery member transferring gas to air sac of lung, and expandable member to occlude airway while probe extends through

Patent Assignee: BRONCUS TECHNOLOGIES INC (BRON-N); COOPER J D (COOP-I); FRENCH G E (FREN-I); HAUGAARD D (HAUG-I); KAPLAN G (KAPL-I); LAUFER M D (LAUF-I); LOOMAS B (LOOM-I); ROSCHAK E (ROSC-I); TANAKA D (TANA-I); THOMPSON D (THOM-I); KEAST T (KEAS-I); ROSS J A (ROSS-I)

Inventor: COOPER J D; DAVENPORT J M; LAUFER M D; LOOMAS B; TANAKA D;
THOMPSON D; FRENCH G E; HAUGAARD D; KAPLAN G; ROSCHAK E; KEAST T; ROSS J
A

Number of Countries: 095 Number of Patents: 015 Patent Family:

Pat	tent No	Kind	Date	Applicat No	Kind	Date	Week	
WO	200110314	A2	20010215	WO 2000US21637	Α	20000807	200118	В
ΑU	200065308	Α	20010305	AU 200065308	Α	20000807	200130	
ΕP	1151729	A1	20011107	EP 2000952649	Α	20000807	200168	
				EP 2001113736	Α	20000807		
ΕP	1143864	A2	20011017	EP 2000952649	Α	20000807	200169	
				WO 2000US21637	Α	20000807		
US	20020042564	A1	20020411	US 99147528	P	19990805	200227	
				US 2000176141	P	20000114		
			•	US 2000633651	Α	20000807		
				US 2001908087	Α	20010718		
US	20020042565	A1	20020411	US 99147528	P	19990805	200227	
				US 2000176141	P	20000114		
			•	US 2000633651	Α	20000807		
				US 2001908177	Α	20010718		
US	20020049370	A1	20020425	US 99147528	P	19990805	200233	
				US 2000176141	P	20000114		
				US 2000633651	Α	20000807		
				US 2001908008	Α	20010718		
JP	2003506132	W	20030218	WO 2000US21637	Α	20000807	200315	
				JP 2001514843	Α	20000807		

Serial 10/613860 March 31, 2005

US	6629951	·B2	20031007 -	US	99147528	P	19990805	200374
				US	2000176141	P	20000114	
				US	2000633651	Α	20000807	
				US	2001908008	A	20010718	
ΕP	1143864	В1	20040204	ΕP	2000952649	Α	20000807	200410
				WO	2000US21637	Α	20000807	
				ΕP	2001113736	Α	20000807	
US	6692494	B1	20040217	US	99147528	P	19990805	200413
				US	2000176141	P	20000114	
				US	2000633651	Α	20000807	
DE	60008072	E	20040311	DE	8072	Α	20000807	200419
				ΕP	2000952649	A	20000807	
				WO	2000US21637	Α	20000807	
ĘР	1400204	A1	20040324	ΕP	2000952649	Α	20000807	200421
				ΕP	200324162	Α	20000807	
US	20040073201	<b>A</b> 1	20040415	U	5 99147528	P	19990805	200426
				US	2000176141	P	20000114	
				US	2000633651	Α	20000807	
				US	2003633902	Α	20030804	
US	20050049615	A1	20050303	U	5 99147528	P	19990805	200517
				US	2000176141	P	20000114	
				US	2000633651	Α	20000807	
				US	2003633902	Α	20030804	
			4	US	2004966644	Α	20041015	

Priority Applications (No Type Date): US 2000176141 P 20000114; US 99147528 P 19990805; US 2000633651 A 20000807; US 2001908087 A 20010718; US 2001908177 A 20010718; US 2001908008 A 20010718; US 2003633902 A 20030804; US 2004966644 A 20041015

Patent Details:

EP 1151729

Patent No Kind Lan Pg Main IPC Filing Notes WO 200110314 A2 E 102 A61B-017/22

A61F-002/06

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GF IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200065308 A

A1 E

Based on patent WO 200110314
Div ex application EP 2000952649
Div ex patent EP 1143864

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL RO SI

EP 1143864 A2 E Based on patent WO 200110314
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL RO SI

US 20020042564 A1 A61B-005/00 Provisional application US 99147528

Provisional application US 2000176141
Cont of application US 2000633651
US 20020042565 A1 A61B-005/00 Provisional application US 99147528

Provisional application US 2000176141

Cont of application US 2000633651
US 20020049370 A1 A61B-017/00 Provisional application US 99147528

Serial 10/613860 March 31, 2005

				Provisional application US 2000176141
				Cont of application US 2000633651
JP	2003506132	W 104	A61B-017/02	Based on patent WO 200110314
US	6629951	B2	A61M-029/00	Provisional application US 99147528
				Provisional application US 2000176141
				Cont of application US 2000633651
ED	1143864	B1 E	A61B-017/22	Related to application EP 2001113736
	1113001	<b>-</b>	11012 017,12	Related to patent EP 1151729
				Based on patent WO 200110314
	Decimated	States (	Regional) · AT	BE CH CY DE DK ES FI FR GB GR IE IT LI
	LU MC NL P		Regional, . Al	DE CH CI DE DA DO II IA OD OA IE II EI
			7.C1D 010/10	P
US	6692494	B1	A61B-018/18	Provisional application US 99147528
				Provisional application US 2000176141
DE	60008072	E	A61B-017/22	Based on patent EP 1143864
				Based on patent WO 200110314
ΕP	1400204	A1 E	A61B-008/06	Div ex application EP 2000952649
				Div ex patent EP 1143864
	Designated	States (	Regional): AL	AT BE CH CY DE DK ES FI FR GB GR IE IT
	LI LT LU LV	MC MK N	L PT SE	
US	20040073203	1 A1	A61B-018/18	Provisional application US 99147528
			•	Provisional application US 2000176141
				Cont of application US 2000633651
				Cont of patent US 6692494
IIC	20050049615	5 7 1	761B-017/10	Provisional application US 99147528
0.5	2003004901.	J AI	A01B-017/10	FIGURATIONAL applicacion of 99147326
				Provisional application US 2000176141
				Cont of application US 2000633651
				Cont of application US 2003633902

Abstract (Basic): WO 200110314 A2

NOVELTY - The device (220) has a probe (216) to locate at least one site to create a collateral **channel** in the **lung** and to puncture an **airway** (100) wall in the **lung** and detect the presence of blood. The probe has a gas delivery member (214), to transfer a volume of gas to an **air** sac (102) of the diseased **lung**, and an expandable **occlusion** member (218) at a distal end of the device to sealingly **occlude** the **airway** while permitting the probe to extend proximally through the expandable member.

Cont of patent US 6692494

DETAILED DESCRIPTION - The probe collateral channel is created using a mechanical, electrical, laser, ultrasonic, microwave energy or chemical forming device, which uses RF energy and is capable of dilation, cutting piercing and bursting. The probe has a fiber optic cable to view an airway in the lung and collects data on pressure, volume or flow rate of gas in the doorway. INDEPENDENT CLAIMS are included for: 1) a method of creating gaseous flow within a diseased lung; 2) a medical device for detecting motion within tissue by observing a Doppler shift and for creating channels in tissue; 3) a medical device for creating an opening in tissue within the lungs and applying heat to the opening; 4) an implantable device comprising a conduit for placement in a collateral channel within a diseased lung; 5) a kit comprising a conduit and a delivery catheter for maintaining the patency of an opening in the tissue; and 6) a method of determining

ASRC Searcher: Jeanne Horrigan Serial 10/613860

March 31, 2005

the effectiveness of a procedure to improve gaseous flow in a diseased lung.

USE - For altering gaseous flow in a diseased lung.

DESCRIPTION OF DRAWING(S) - The figure illustrates a method and device for determining collateral ventilation in a lung.

Airway of diseased lung (100)

Air sac (102)

Gaseous flow altering device (220)

Gas delivery member (214)

Probe (216)

Expandable occlusion member. (218)

pp; 102 DwgNo 1F/9

Derwent Class: P31; P32; P34; P35

International Patent Class (Main): A61B-005/00; A61B-008/06; A61B-017/00;

A61B-017/02; A61B-017/10; A61B-017/22; A61B-018/18; A61F-002/06;

A61M-029/00

International Patent Class (Additional): A61B-001/04; A61B-001/267;

A61B-005/08; A61B-008/12; A61B-017/24; A61F-002/02; A61F-007/00;

A61M-001/04; A61M-029/02; A61M-031/00; A61M-037/00; A62B-007/00

# 10/34/5 (Item 5 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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011834158 \*\*Image available\*\*

WPI Acc No: 1998-251068/199822

Laryngeal airway device for ventilating airway and lungs of a sick or injured person - has air tube with sealing member on its' inner end that is located in pharynx having passageway and including an interior surface with hole in it which abuts laryngeal inlet

Patent Assignee: AUGUSTINE MEDICAL INC (AUGU-N); ARIZANT HEALTHCARE INC (ARIZ-N)

Inventor: ARNOLD R C; AUGUSTINE S D; MCGRAIL T W
Number of Countries: 080 Number of Patents: 011

Patent Family:

		•							
Pat	ent No	Kind	Date	App	plicat No	Kind	Date	Week	
WO	9816273	A1	19980423	WO	97US16838	Α	19970924	199822	В
AU	9744917	Α	19980511	AU	9744917	A	19970924	199837	
US	5937859	Α	19990817	US	96730791	A	19961016	199939	
ΕP	952859	A1	19991103	EP	97943444	A	19970924	199951	
				WO	97US16838	A	19970924		
CN	1236326	Α	19991124	CN	97198827	Α	19970924	200014	
ΑU	719829	В	20000518	AU	9744917	A	19970924	200032	
US	6070581	Α	20000606	US	96730791	A	19961016	200033	
				US	97885682	Α	19970630		
ΕP	952859	B1	20001108	EP	97943444	Α	19970924	200062	
				WO	97US16838	Α	19970924		
DE	697020502	E	20001214	DE	97603502	Α	19970924	200104	
				ΕP	97943444	Α	19970924		
				WO	97US16838	Α	19970924		
ES	2154056	Т3	20010316	ΕP	97943444	Α	19970924	200123	
CA	2265482	С	20040420	CA	2265482	A	19970924	200428	
				WO	97US16838	Α	19970924		

Serial 10/613860 March 31, 2005

Priority Applications (No Type Date): US 97885682 A 19970630; US 96730791 A 19961016

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9816273 A1 E 64 A61M-016/04

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9744917 A A61M-016/04 Based on patent WO 9816273

US 5937859 A A61M-016/00

EP 952859 A1 E A61M-016/04 Based on patent WO 9816273

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

CN 1236326 A A61M-016/04

AU 719829 B A61M-016/04 Previous Publ. patent AU 9744917

Based on patent WO 9816273

US 6070581 A A61M-016/00 CIP of application US 96730791

CIP of patent US 5937859

EP 952859 B1 E A61M-016/04 Based on patent WO 9816273

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DE 697020502 E A61M-016/04 Based on patent EP 952859

Based on patent WO 9816273

ES 2154056 T3 A61M-016/04 Based on patent EP 952859

CA 2265482 C E A61M-016/04 Based on patent WO 9816273

# Abstract (Basic): WO 9816273 A

Laryngeal airway device (10) for ventilating person's airway is an air tube (12) with a sealing member (14) mounted near one end with a passageway in it. The sealing member is able to occupy space in the pharynx near the larynx of the person and includes an anterior surface (16) able to abut the rim of the laryngeal inlet. At least one hole (18) is provided in the anterior surface opening to the passageway.

Also claimed is a combination to facilitate lung ventilation in a person consisting of the claimed laryngeal airway device and a pharyngeal blade for introducing its sealing member into the pharynx.

Also claimed is a method of managing a person's airway using the laryngeal airway device by advancing the distal sealing member along the tongue of the person until it lodges in the hypopharyngeal space and its anterior surface abuts against and forms a seal with the laryngeal inlet with its hole positioned in the inlet and ventilating the airway and lungs of the person through the proximal air channel.

USE - The laryngeal airway device is designed for control of a human airway during the administration of general anaesthesia, for mechanical ventilation of a patient with diseased or injured lungs, and during resuscitation of a non-breathing patient.

ADVANTAGES - The device is non-invasive and does not contact structures below the vocal cords. It seals directly within the laryngeal inlet instead of against pharyngeal structures and makes a seal that is sufficient to permit positive pressure ventilation and avoid gastric insufflation and aspiration. It is easy to insert and has

Serial 10/613860 March 31, 2005

a definite insertion endpoint ensuring alignment with the airway opening.

Dwg.1A/21

Derwent Class: A96; P34

International Patent Class (Main): A61M-016/00; A61M-016/04

International Patent Class (Additional): A61M-016/00; A0A6-1M016/04

10/34/7 (Item 7 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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003311838

WPI Acc No: 1982-F9846E/198220

Oesophageal-endotracheal airway for use in resuscitation - has long inner tube and shorter, coaxial outer tube with expandable sleeve carried by distal end of each tube

Patent Assignee: BRONSON P A (BRON-I); WALLACE P A (WALL-I)

Inventor: BRONSON P A; WALLACE P A

Number of Countries: 010 Number of Patents: 006

Patent Family:

Patent No		Kind	Date	App	olicat No	Kind	Date	Week	
US 4	4327720	Α	19820504		•			198220	В
ZA	8202977	Α	19830201					198317	
EP S	92618	Α	19831102	ĒΡ	82302156	Α	19820427	198345	
CA :	1178868	Α	19841204					198502	
EP S	92618	В	19870422					198716	
DE :	3276101	G	19870527					198722	

Priority Applications (No Type Date): US 795645 A 19790122; EP 82302156 A 19820427

Cited Patents: CH 541332; DE 1566566; DE 2120164; FR 1052629; US 3322126; US 4090518; US 4231365; US 4256099; DD 68597

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 4327720 A 8

EP 92618 A E

Designated States (Regional): CH DE FR GB IT LI SE

EP 92618 B F

Designated States (Regional): CH DE FR GB IT LI SE

Abstract (Basic): US 4327720 A

The airway comprises an elongated inner tube which can be inserted into the trachea or the oesophagus. The inner tube is inside a shorter outer tube, and the tubes form a passageway between them. An expandable member such as an inflatable sleeve is carried on the outer wall near the distal end of each tubular member. When the sleeves are expanded they form effective seals with the wall of the body channel. The inner tube extends through the wall of the outer tube near the proximal end.

The proximal end of each tube is adapted for being coupled to an air pump. Suction tubes can be inserted through the inner tube or through the passageway for pumping out either the stomach or the lungs.

Abstract (Equivalent): EP 92618 B

An esophageal-endotracheal, flexible, tubular airway device

Serial 10/613860 March 31, 2005

> \_including a shorter flexible tube (9) having an\_open-ended proximal end portion (9d) and an open-ended distal end portion (9a), which tube (9) is of a length such as to terminate, when inserted through the mouth of a patient, between the epiglottis and base of the tongue, a longer flexible tube (11) having an open-ended proximal end portion (11d) and an open-ended distal end portion (12), an expandable member (15a) disposed on the longer tube (11), for insertion through the mouth, which expandable member (15a) is operable for sealingly engaging, when projecting into the esophagus, the wall of the esophagus below the mouth of the trachea, and an expandable member (15b) disposed on the shorter tube (9) for simultaneously sealing off the air passageways leading to the nose and to the mouth of the patient, which device is characterised in that the longer tube (11) is dimensioned for insertion through the mouth into either the esophagus or the trachea of a patient, and the device is operable to provide separate passages for administering artificial respiration, stomach drainage and long drainage simultaneously, the shorter flexible tube (9) has a larger diameter than the longer flexible tube (11), the smaller-diameter, longer flexible tube (11) is disposed inside said shorter tube (9) whereby the outer wall of said longer tube (11) and the inner wall of said shorter tube (9) define therebetween an annular or part annular passageway (9b) opening from the shorter tube distal end portion (9a) and said outer wall of the longer tube (11), such that a section tube (21) could be extended through said passageway (9b) and shorter tube distal end portion (9a) and out of said opening into said trachea or into said esophagus for evacuating fluid contents therefrom while administering artificial respiration to the lungs , with said opening being so dimensioned that even with a suction tube projecting through said opening in

Derwent Class: P34

International Patent Class (Additional): A61M-016/00; A61M-025/00

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ASRC Searcher: Jeanne Horrigan
Serial 10/613860
March 31, 2005
-File 350:Derwent WPIX 1963-2005/UD,UM &UP=200519 _
        (c) 2005 Thomson Derwent
File 347: JAPIO Nov 1976-2004/Nov (Updated 050309)
         (c) 2005 JPO & JAPIO
        Items Description
        30568 CATHETER? ?
S1
       109010 AIRTIGHT OR (AIR OR FLUID) () TIGHT OR HERMETIC?
S2
       997382 SEAL??? OR PLUG? ? OR OCCLUS??? OR OCCLUD?
S3
S4
        4649 AIRWAY? ? OR (THORACIC OR CHEST) () WALL? ?
        24187 LUNG OR LUNGS
S5
S6
      1332174 AIR
      2380111 CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUB-
             ULAR OR TUBELIKE OR PIPE OR PIPES OR PIPET? OR DUCT? ?
        17034
                S1 NOT S7
S8
S9
                S8 AND S2()S3 AND S4 AND S5
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200519
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File 347: JAPIO Nov 1976-2004/Nov (Updated 050309)

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Set	Items	Description
S1	9	COLLATERAL () VENTILATION
S2	30568	CATHETER? ?
S3	109010	AIRTIGHT OR (AIR OR FLUID) () TIGHT OR HERMETIC?
S4	997382	SEAL??? OR PLUG? ? OR OCCLUS??? OR OCCLUD?
S5	4649	AIRWAY? ? OR (THORACIC OR CHEST)()WALL? ?
S6	24187	LUNG OR LUNGS
S7	1332174	AIR
S8	2380111	CONDUIT? ? OR CHANNEL? ? OR TUBE OR TUBES OR TUBING OR TUBULAR OR
TUBE	LIKE OR PIP	E OR PIPES OR PIPET? OR DUCT? ?
S9	17034	S2 NOT S8

S10 4 S1 AND (S2 OR S8) AND S3:S4 AND S5 AND S6 [duplicates]